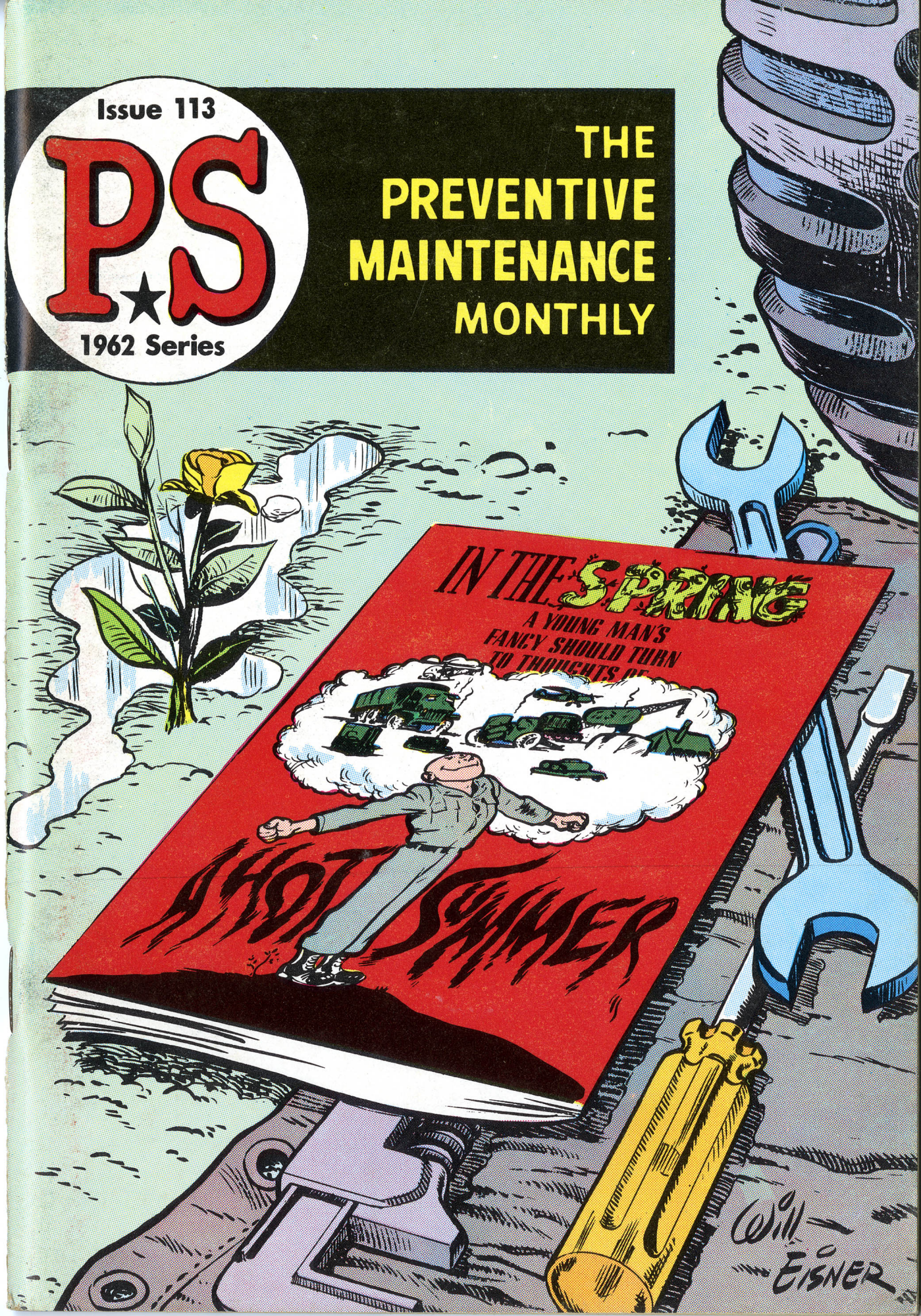
Issue 113

PS

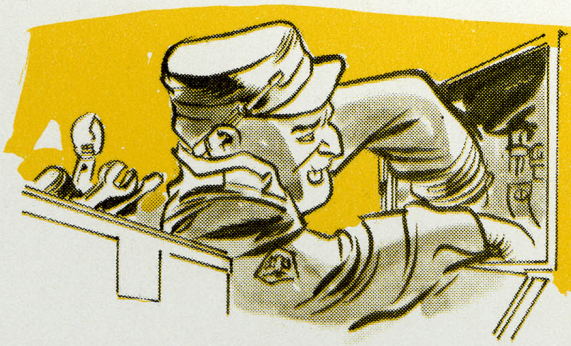
1962 Series

THE PREVENTIVE MAINTENANCE MONTHLY



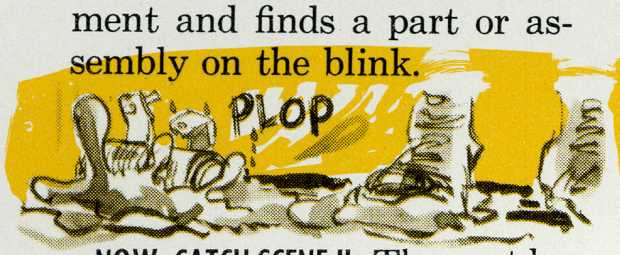
THE PARTS YOU'VE REPLACED...

TOTE



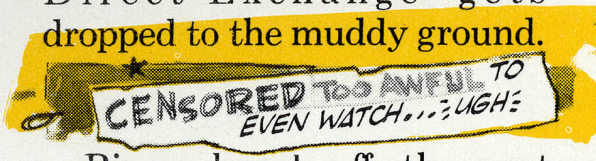
PICTURE THIS: Your mechanic checks out your ailing equipment and finds a part or assembly on the blink.

He takes off the bad piece and ever-so-carefully puts on a good one.



NOW, CATCH SCENE II: The part he took off—the one needed for Direct Exchange—gets dropped to the muddy ground.

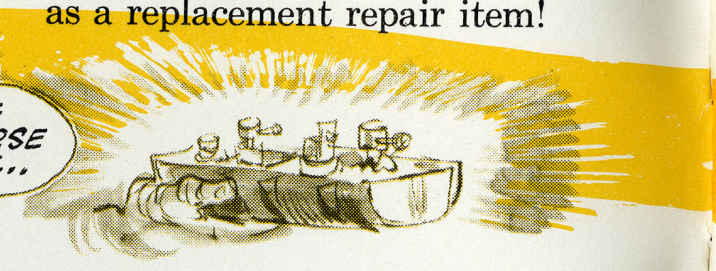
Then it gets heaved into the bed of a ¾-ton truck.



Pieces break off, the part gets gooked up with mud, grease or dust, it gets dented or cracked. Almost anything can and does happen to it.

That's the component that has to be checked out by your support, repaired and returned as a replacement repair item!

You may have seen this yourself. If you do, tell your buddy he'd better cut out that sort of thing or he won't be your buddy for long. (Of course, you'd **never** handle parts like that yourself.)



So, to help make sure you get the best repair parts supply, handle replaced componnets like . . . well, like eggs—fresh eggs . . . gently.

THE PARTS YOU'VE REPLACED...

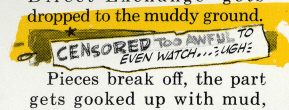
TOTE

PICTURE THIS: Your mechanic checks out your ailing equipment and finds a part or assembly on the blink.

He takes off the bad piece and ever-so-carefully puts on a good one.

NOW, CATCH SCENE II: The part he took off—the one needed for Direct Exchange—gets dropped to the muddy ground.

Then it gets heaved into the bed of a ¾-ton truck.



Pieces break off, the part gooked up with mud, grease or dust, it gets dented or cracked. Almost anything can and does happen to it.

That's the component that has to be checked out by your support, repaired and returned as a replacement repair item!

You may have seen this yourself. If you do, tell your buddy he'd better cut out that sort of thing or he won't be your buddy for long. (Of course, you'd **never** handle parts like that yourself.)

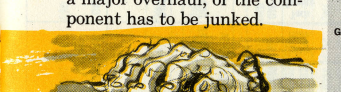
So, to help make sure you get the best repair parts supply, handle replaced components like... well, like eggs—fresh eggs... gently.

GENTLY

Your equipment now works fine. Great. He's doing his job real fine—so far.

And it bounces around for five rocky miles and gets dropped on a stack of other components like itself.

What started out as a minor repair job often turns out to be a major overhaul, or the component has to be junked.



Some day it may make the big difference between your equipment delivering firepower or not.

PS THE PREVENTIVE MAINTENANCE MONTHLY

Issue No. 113 1962 Series

Published by the Department of the Army for the information of organizational maintenance and supply personnel. Distribution is made through normal publication channels. Within limits of availability, older issues may be obtained direct from PS Magazine, Raritan Arsenal, Metuchen, New Jersey.

IN THIS ISSUE

ARTICLES

Features	Page
Small Arms Cleaners, Lubes, Preservatives	2-3
Publication Indexes	6-10
Aircraft Publications: Direct Mail Both Ways	52-57
Mechanical Puller Kit	50-51
Communications Equipment	
Vehicle-Mounted Radio Antennas: Joint Care	22
TV-7/U Test Set: AC Line Cord Protection	27
MT-791/U Mounting: Notch the Locking Lever	27
AN/GRC-3-8: • Audio Connector Contacts	28
• Blue Phenolic Receptacles	20
AN/PRC-6: Wrap Antenna With Care	23
Air Valve Operation	26
Replacing Fuses	20
Vehicle-Mounted Radios: Dumbbell Strain	28
Switchboard Telephone Dials: Scratching	26
Wire Skinning: Do A Clean Job	25
AB-15 Mast Base: Don't Forget the Hat	24
AN/PRC-10: Spread the Legs	21
Aircraft	
TC 6-9 SM's: Don't Let 'Em Get Sidetracked	58
Seminole (L-23): Stop Fuel Draining Splash	59
Chopper Plexiglass Bubbles: Don't Scratch 'Em	60
Iroquois (NU-1A) Engine Oil: Watch the Spills	61
AN/ARN-6 & AN/ARN-59 Radio Compasses	62-64
Small Arms	
Don't Switch Small Arms Parts	4
Ammunition Magazine Case	5
Missile	
Hawk: • Loader-Transporter	17-18
• XM78E3 Launcher	16
• Missile Exit Nozzle	16
Tracked Vehicles	
M60 Tank: • Save the Starter	12
• Turret Seal Pressure	13
• Which Fuel to Use When	15
• M105C Telescope	15
• How to Get Litter Kits	39
M113 APC: Patching Rubber Fuel Cell	37
General	
Electric Arc Welders	38
Equipment With Radium: Be Careful	40
Engineer Equipment: 90-Day Guarantee	43
New Publications	47

DEPARTMENTS

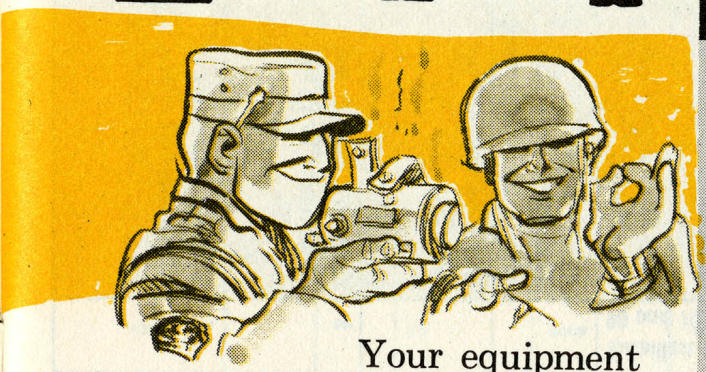
Connie Rodd	11
Joe's Dope	29
Question and Answer	37
Connie Rodd's Briefs	Inside Back Cover

PS wants your ideas and contributions, and is glad to answer your questions. Names and addresses are kept in confidence. Just write to:

Sgt Half-Mast,
PS Magazine,
Raritan Arsenal,
Metuchen, New Jersey.

DISTRIBUTION:
In accordance with requirements submitted on DA Form 12-4.

GENTLY



Your equipment now works fine. Great. He's doing his job real fine—so far.

And it bounces around for five rocky miles and gets dropped on a stack of other components like itself.

What started out as a minor repair job often turns out to be a major overhaul, or the component has to be junked.

Some day it may make the big difference between your equipment delivering firepower or not.

PS THE PREVENTIVE MAINTENANCE MONTHLY

Issue No. 113 1962 Series

Published by the Department of the Army for the information of organizational maintenance and supply personnel. Distribution is made through normal publication channels. Within limits of availability, older issues may be obtained direct from PS Magazine, Raritan Arsenal, Metuchen, New Jersey.

IN THIS ISSUE

ARTICLES

Features	Page
Small Arms Cleaners, Lubes, Preservatives	2-3
Publication Indexes	6-10
Aircraft Publications: Direct Mail Both Ways	52-57
Mechanical Puller Kit	50-51
Communications Equipment	
Vehicle-Mounted Radio Antennas: Joint Care	22
TV-7/U Test Set: AC Line Cord Protection	27
MT-791/U Mounting: Notch the Locking Lever	27
AN/GRC-3-8: • Audio Connector Contacts	28
• Blue Phenolic Receptacles	20
AN/PRC-6: Wrap Antenna With Care	23
Air Valve Operation	26
Replacing Fuses	20
Vehicle-Mounted Radios: Dumbbell Strain	28
Switchboard Telephone Dials: Scratching	26
Wire Skinning: Do A Clean Job	25
AB-15 Mast Base: Don't Forget the Hat	24
AN/PRC-10: Spread the Legs	21
Aircraft	
TC 6-9 SM's: Don't Let 'Em Get Sidetracked	58
Seminole (L-23): Stop Fuel Draining Splash	59
Chopper Plexiglass Bubbles: Don't Scratch 'Em	60
Iroquois (NU-1A) Engine Oil: Watch the Spills	61
AN/ARN-6 & AN/ARN-59 Radio Compasses	62-64
Small Arms	
Don't Switch Small Arms Parts	4
Ammunition Magazine Case	5
Missile	
Hawk: • Loader-Transporter	17-18
• XM78E3 Launcher	16
• Missile Exit Nozzle	16
Tracked Vehicles	
M60 Tank: • Save the Starter	12
• Turret Seal Pressure	13
• Which Fuel to Use When	15
• M105C Telescope	15
• How to Get Litter Kits	39
M113 APC: Patching Rubber Fuel Cell	37
General	
Electric Arc Welders	38
Equipment With Radium: Be Careful	40
Engineer Equipment: 90-Day Guarantee	43
New Publications	47

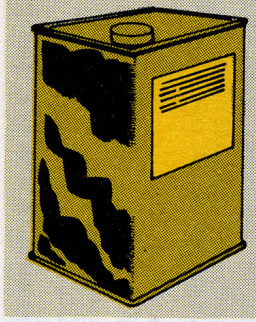
DEPARTMENTS

Connie Rodd	11
Joe's Dope	29
Question and Answer	37
Connie Rodd's Briefs	Inside Back Cover

PS wants your ideas and contributions, and is glad to answer your questions. Names and addresses are kept in confidence. Just write to:

Sgt Half-Mast,
PS Magazine,
Raritan Arsenal,
Metuchen, New Jersey.

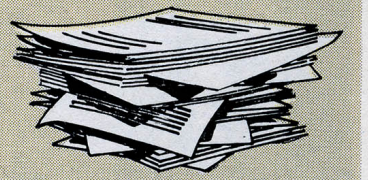
DISTRIBUTION:
In accordance with requirements submitted on DA Form 12-4.



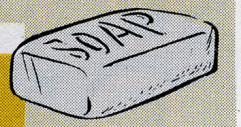
SMALL ARMS GUIDE

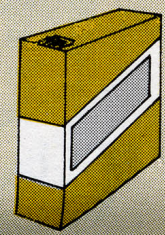
CLEANERS, LUBES AND PRESERVATIVES

WHAT, WHEN AND HOW TO USE THEM



For Requisitioning				7.62 mm	All	.30 Cal		.45 Cal		Machine Guns				Others			Remarks
HERE THEY ARE Note: Check returning issue slips for name changes	FSN	Unit of Issue	Tech Service	Rifles	Rifle Grenade Launchers	Rifles & Carbines	Auto Rifles	Pistols	Sub-Machine Guns	7.62-mm	.30 Cal	.50 Cal	Mortars and Rocket Launchers	Shotguns	M79 Grenade Launcher	Recoilless Rifles 90 and 105-mm	Note: Can change. Check LO's & FM's.
SOAP, LAUNDRY, Fed-P-S-591C and HOT WATER	7930-129-0801	1-LB	QMC	B	B	B	B	B	B	B	B	B	B	B	B	B	Only if bore cleaner not on hand—but lube right after using. Lukewarm for webbing.
SWAB, SMALL ARMS CLEANING: Cotton 2½ in square (Formerly patches)	1005-288-2868 1005-288-3565	20-EA 200-EA	ORD	B	B	B	B	B	B	B	B	B					Keep using them until one comes clean.
CLOTH, COTTON FLANNEL: bore cleaning, 4 in x 50 yard roll	8305-254-4828	ROLL	QMC	B	B	B	B	B	B	B	B	B		B	B	B	Cut to size needed. May be substituted for SWAB.
RAG, WIPING, COTTON, bleached or unbleached FED DDD-R-30 Class 1 or 2	7920-205-1711	1-LB	QMC	C	C	C	C	C	C	C	C	C	C	C	C	C	Once over lightly. Easy on the spit and polish routine.



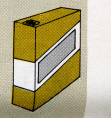


SMALL ARMS GUIDE

CLEANERS, LUBES AND PRESERVATIVES

WHAT, WHEN AND HOW TO USE THEM

For Requisitioning				7.62 mm	All	.30 Cal		.45 Cal		Machine Guns				Others				Remarks
HERE THEY ARE Note: Check returning issue slips for name changes	FSN	Unit of Issue	Tech Service	Rifles	Rifle Grenade Launchers	Rifles & Carbines	Auto Rifles	Pistols	Sub-Machine Guns	7.62-mm	.30 Cal	.50 Cal	Mortars and Rocket Launchers	Shotguns	M79 Grenade Launcher	Recoilless Rifles 90 and 105-mm		Note: Can change. Check LO's & FM's.
SOAP, LAUNDRY, Fed-P-S-591C and HOT WATER	7930-129-0801	1-LB	QMC	B	B	B	B	B	B	B	B	B	B	B	B	B		Only if bore cleaner not on hand—but lube right after using. Lukewarm for webbing.
SWAB, SMALL ARMS CLEANING: Cotton 2½ in square (Formerly patches)	1005-288-2868 1005-288-3565	20-EA 200-EA	ORD	B	B	B	B	B	B	B	B	B						Keep using them until one comes clean.
CLOTH, COTTON FLANNEL: bore cleaning, 4 in x 50 yard roll	8305-254-4828	ROLL	QMC	B	B	B	B	B	B	B	B	B		B	B	B		Cut to size needed. May be substituted for SWAB.
RAG, WIPING, COTTON, bleached or unbleached FED DDD-R-30 Class 1 or 2	7920-205-1711	1-LB	QMC	C	C	C	C	C	C	C	C	C	C	C	C	C		Once over lightly. Easy on the spit and polish routine.

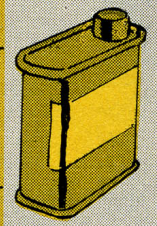


CLOTH, ABRASIVE: CROCUS: Ferric oxide and quartz jean-cloth backing, closed coat, 9x11 sheet (P-C-458)	5350-192-5052	50-SHEET sleeve	ORD	G	G	G	G	G	G	G	G	G	G	G	G	G		Strictly for armorer- artificer's use only.
GREASE, RIFLE: Lub (RG)	9150-248-3480	5-CC TUBE	QMC	A		A	A											Use light coat on receiver group in wet climates.
THINNER, PAINT, MINERAL SPIRITS: Petroleum distillate (Fed TT-T-291	8010-242-2089 8010-242-2086	1-GAL 5-GAL	ENG	D	D	D	D	D	D	D	D	D	D	D	D	D		Or use a dry cleaning solvent. Be sure to lube after use of either one.
CLEANING COMPOUND SOLVENT: Rifle Bore cleaner	6850-682-6835 6850-682-6834 6850-682-6833 6850-682-6832	2-OZ 6-OZ 1-QT 1-GAL	ORD	B	B	B	B	B	B	B	B	B	B	B	B	B		For gas system and bolt assembly also. See SOAP and HOT WATER.
LUBRICATING OIL: Weapons (LAW) MIL-L-14107	9150-664-0038 9150-292-9689	4-OZ 1-QT	QMC	A	A	A	A	A	A	A	A	A	A	A	A	A		For all small arms at temperatures below 0° F.
LUBRICATING OIL, GENERAL PURPOSE: Preservative special, (PL-SP) (MIL-L-644A)	9150-185-0629 9150-273-2389 9150-231-6689	2-OZ 4-OZ 1-QT	QMC	A	A	A	A	A	A	A	A	A	A	A	A			For all small arms at temperatures above 0° F.
LINSEED OIL, Raw: FS TT-O-369	8010-224-6556 8010-221-0611	1-QT 1-GAL	ENG	E		E	E		E			E		E	E			Put this on with your fingers and easy does it.
NEAT'S FOOT OIL, Fed C-N-200	8030-244-1033	1-GAL	QMC	F		F	F	F					F	F				For leather slings and carrying cases. Use depends on weapon model.

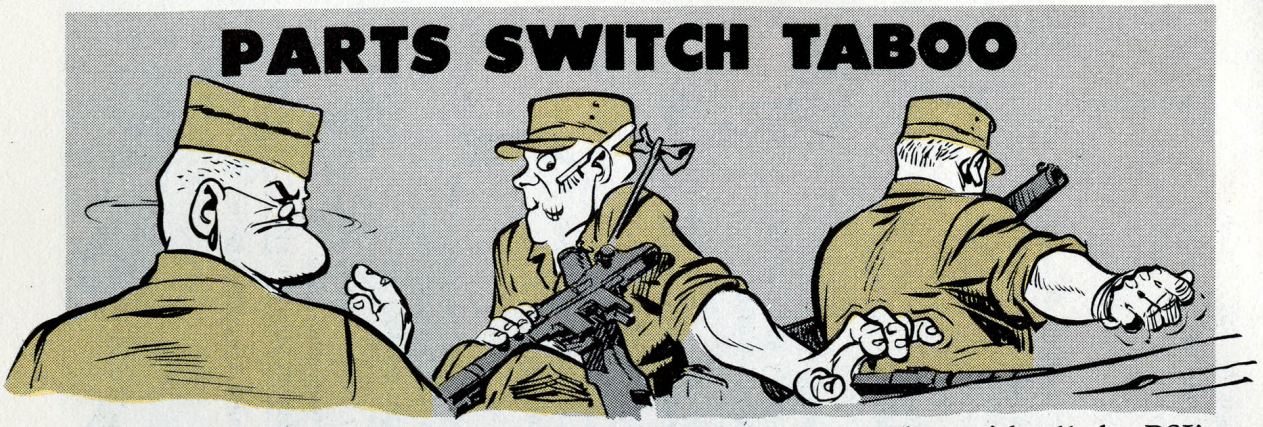
A=To Lube B=Bore Only C=Whole Weapon D=To Clean After Storage E=Preserve Wood Parts F=Preserve Leather G=Polish, Remove Rust Stains

CLOTH, ABRASIVE: CROCUS: Ferric oxide and quartz jean-cloth backing, closed coat, 9x11 sheet (P-C-458)	5350-192-5052	50-SHEET sleeve	ORD	G	G	G	G	G	G	G	G	G	G	G	G	G	Strictly for armorer- artificer's use only.
GREASE, RIFLE: Lub (RG)	9150-248-3480	5-CC TUBE	QMC	A		A	A										Use light coat on receiver group in wet climates.
THINNER, PAINT, MINERAL SPIRITS: Petroleum distillate (Fed TT-T-291	8010-242-2089 8010-242-2086	1-GAL 5-GAL	ENG	D	D	D	D	D	D	D	D	D	D	D	D	D	Or use a dry cleaning solvent. Be sure to lube after use of either one.
CLEANING COMPOUND SOLVENT: Rifle Bore cleaner	6850-682-6835 6850-682-6834 6850-682-6833 6850-682-6832	2-OZ 6-OZ 1-QT 1-GAL	ORD	B	B	B	B	B	B	B	B	B	B	B	B	B	For gas system and bolt assembly also. See SOAP and HOT WATER.
LUBRICATING OIL: Weapons (LAW) MIL-L-14107	9150-664-0038 9150-292-9689	4-OZ 1-QT	QMC	A	A	A	A	A	A	A	A	A	A	A	A	A	For all small arms at temperatures below 0° F.
LUBRICATING OIL, GENERAL PURPOSE: Preservative special, (PL-SP) (MIL-L-644A)	9150-185-0629 9150-273-2389 9150-231-6689	2-OZ 4-OZ 1-QT	QMC	A	A	A	A	A	A	A	A	A	A	A	A		For all small arms at temperatures above 0° F.
LINSEED OIL, Raw: FS TT-O-369	8010-224-6556 8010-221-0611	1-QT 1-GAL	ENG	E		E	E		E			E		E	E		Put this on with your fingers and easy does it.
NEAT'S FOOT OIL, Fed C-N-200	8030-244-1033	1-GAL	QMC	F		F	F	F					F	F			For leather slings and carrying cases. Use depends on weapon model.

A=To Lube B=Bore Only C=Whole Weapon D=To Clean After Storage E=Preserve Wood Parts F=Preserve Leather G=Polish, Remove Rust Stains



PARTS SWITCH TABOO



Maybe you haven't had cause to be reminded lately, but just to be on the safe side let's remember that it's not good to switch small arms parts.

As a f'rinstance, let's take your own rifle. Each part has been fitted, adjusted and mated to do its special job as part of your rifle. Every part moves the way it should at the right split second. That's the way you want every last one of 'em to operate for you.

They'll work that way when Ordnance first checks and gages such parts as bolts, gas cylinders, flash suppressors and the like before they're put in or on your weapon.

With your rifle's parts working smoothly, a switched part won't always mate with its other fitted and adjusted parts. Slipping in a different one could foul up the whole detail.

M1 parts are made to be interchanged, and that's the general idea. But they don't always fit that way 'cause a new part can also throw a rifle's operation outta kilter and cause a rough go for both the M1 and the rifleman.

With a bunch of guys cleaning rifles in the same area it's easy to pick up and insert a stray part that belongs to somebody else's rifle. A switch like that could put a coupla smooth working rifles outta top operation—what with all the PSI's that're let loose when you squeeze the trigger.

Parts look alike but sometimes they're not the same a'tall. Besides, replacing or switching parts is the job of the armorer artificer . . . he's a specialist and has the needed know-how for the right kind of safe and sure firearms operation.

Another thing about small arms—rifles, pistols and what have you. Most of 'em get to be unserviceable because they haven't had the right kind of care. The right kind of small arms maintenance is right kind of use, right kind of storage, right kind of cleaning and right kind of lubrication. It's best to keep your weapon in tip-top operating form at all times and always be on the look-out for signs of rust and corrosion. And keep 'er oiled.

Good rifle care finds burred, worn, loose or cracked parts. These defects ought to be reported to your units armorer artificer—pronto. Oiling jobs—preservation lubricant on metal and linseed oil on wood—should be just enuf, that's all.

FOR THE FULL SCOOP ABOUT SMALL ARMS READ THE FM AND TM THAT GO WITH YOUR WEAPON.

You say you've got an ammo carrying problem that's got you down?

And you're tired of luggin' extra magazines in your pocket?

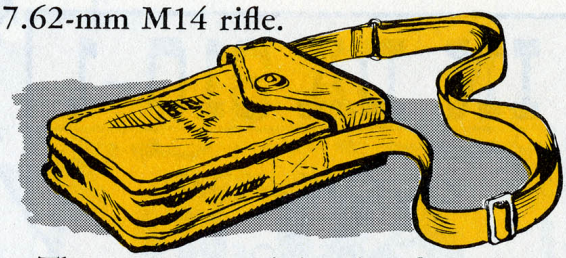
And you're fed up with being speared everytime you sit down?

Well . . . take five, friend, 'cause here's the answer.

It's the ammunition magazine case, FSN 8465-705-2438, a QM item listed in Federal Supply Catalog C2-15A, dated March 1960.

The case is made of cotton duck and webbing and comes with a shoulder strap to make things easier.

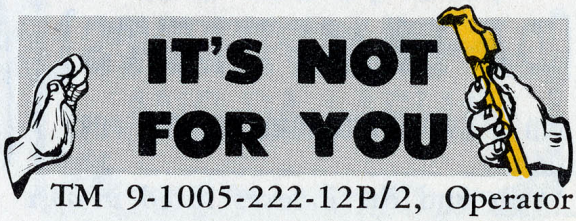
It'll carry a pretty good load of extra ammo for all of your small arms—like .45 caliber for your pistol and submachine gun; .30 caliber for the carbine and M1 and extra clips for your 7.62-mm M14 rifle.



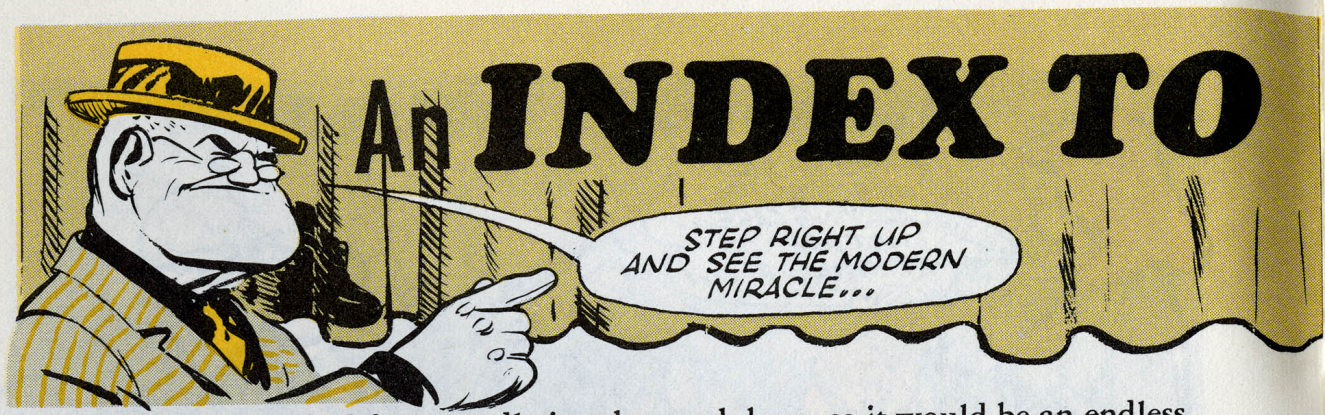
The cases are mighty handy to have around—but they're not up for grabs.

If you have a real need for some but they're in excess of your TOE and TA, tell your supply man to use the procedure outlined on page 12, paragraph 15h in AR 725-5 for requisitioning them.

It says so right in SB 9-75 (29 June 1961). Some small arms gages get sent back for an inspection semiannually and others annually. You guys who use gages to check your machine gun's timing and headspace want to have your gages checked once a year. Your support unit can look at its copy of the SB and fill you in on the details.



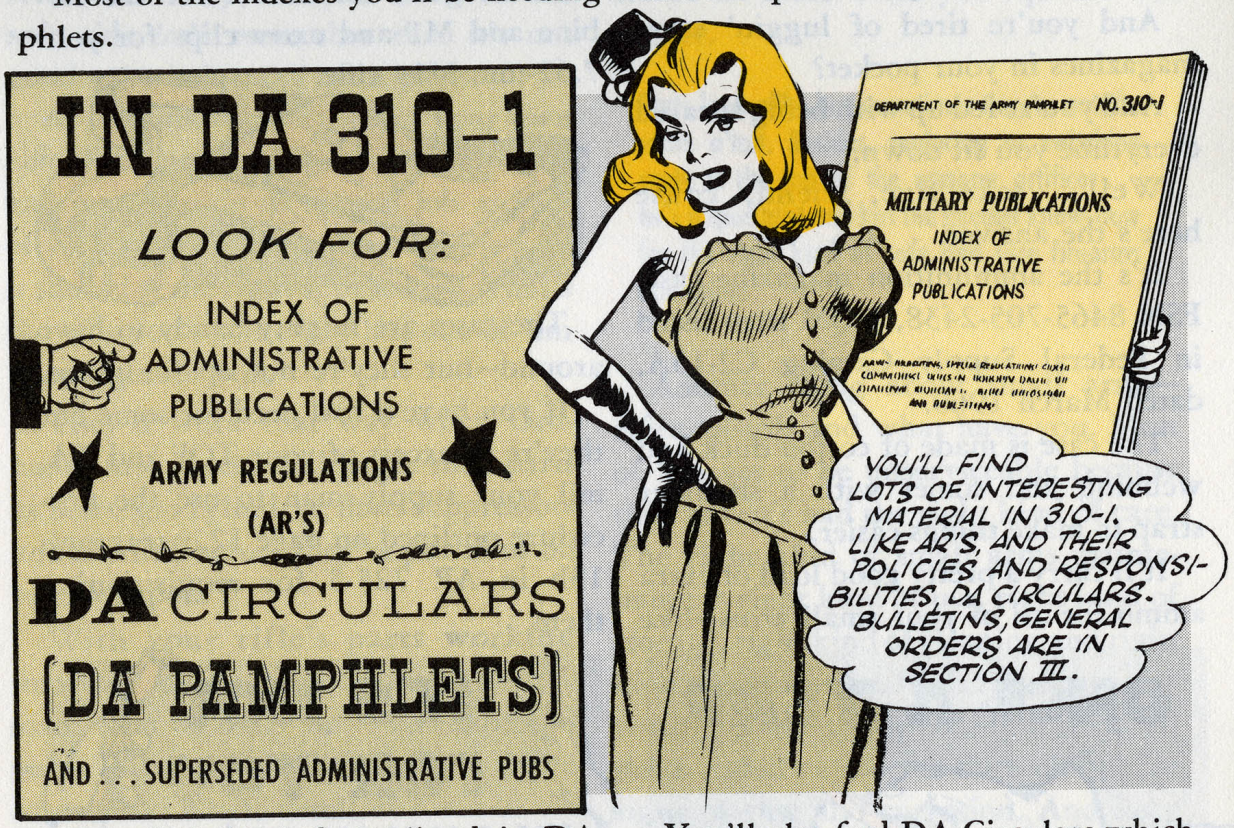
TM 9-1005-222-12P/2, Operator and Organizational Maintenance Repair Parts for Caliber .30 US Rifle M1, M1C and M1D, dated Aug 1961, got you puzzled by authorizing you to replace operating rods in the M1? Well—the latest word is it's for higher echelon only. Replacing the rod calls for gaging—something you're not equipped to do. So leave the job up to your support.



You've never looked for a needle in a haystack because it would be an endless job. Looking for a publication without an index to go by is a big job too.

The index you use depends upon the type of publication you're looking for.

Most of the indexes you'll be needing will be Department of the Army Pamphlets.



You find the indexes listed in DA Pamphlet 310-1, Index of Administrative Publications, under the section entitled DA Pamphlets. Might be a good idea to see what else is listed in the 310-1.

You'll find Army Regulations (AR's) which set down policies and responsibilities and also give administrative procedures. These may be permanent or semi-permanent in nature.

You'll also find DA Circulars which give instructions that're of a one-time action nature, or they'll have info of a temporary nature. The DA Circulars in the 310-series also give corrections, classifications, rescissions, etc. to DA Publications.

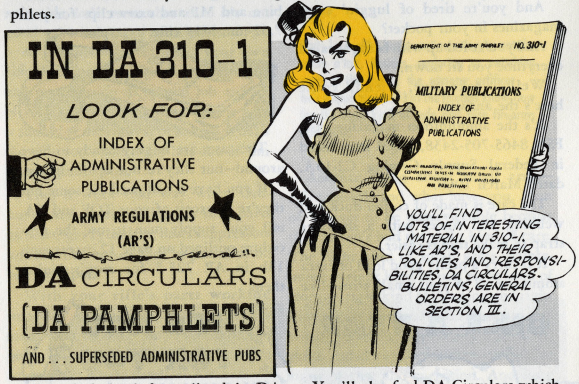
You'll find Bulletins and General Orders listed in Section III or Alphabetical Index of your DA Pam 310-1. You'll not find them in Section I or List

An INDEX TO INDEXES

You've never looked for a needle in a haystack because it would be an endless job. Looking for a publication without an index to go by is a big job too.

The index you use depends upon the type of publication you're looking for.

Most of the indexes you'll be needing will be Department of the Army Pamphlets.



You find the indexes listed in DA Pamphlet 310-1, Index of Administrative Publications, under the section entitled DA Pamphlets. Might be a good idea to see what else is listed in the 310-1.

You'll find Army Regulations (AR's) which set down policies and responsibilities and also give administrative procedures. These may be permanent or semi-permanent in nature.

You'll also find DA Circulars which give instructions that're of a one-time action nature, or they'll have info of a temporary nature. The DA Circulars in the 310-series also give corrections, classifications, rescissions, etc. to DA Publications.

You'll find Bulletins and General Orders listed in Section III or Alphabetical Index of your DA Pam 310-1. You'll not find them in Section I or List of Current Publications and Changes.

It's a good idea to check Section II of your 310-1. That's where you'll find the list of pubs covered by 310-1 that have been superseded or rescinded.

Now take a look at the indexes that you find listed in the DA Pam section. You'll note there's DA Pam 108-1, which is your index of Army motion pictures, film strips, slides and phono recordings.

DA Pam 310-2 is your index of blank forms. You find DA, DD, SF forms and DA labels. Then you'll find some old type forms listed such as WD, WD AGO, and DA AGO. There's one thing to keep in mind when ordering blank forms. You don't have to figure out which is a DA or WD, etc., because they're listed in one numerical series. All you have to do is ask for the DA Form you want, and if it's a WD or DA AGO form you'll still get it.

MORE

INDEXES

of Current Publications and Changes.

It's a good idea to check Section II of your 310-1. That's where you'll find the list of pubs covered by 310-1 that have been superseded or rescinded.

Now take a look at the indexes that you find listed in the DA Pam section. You'll note there's DA Pam 108-1, which is your index of Army motion pictures, film strips, slides and phono recordings.

IN DA 310-2:

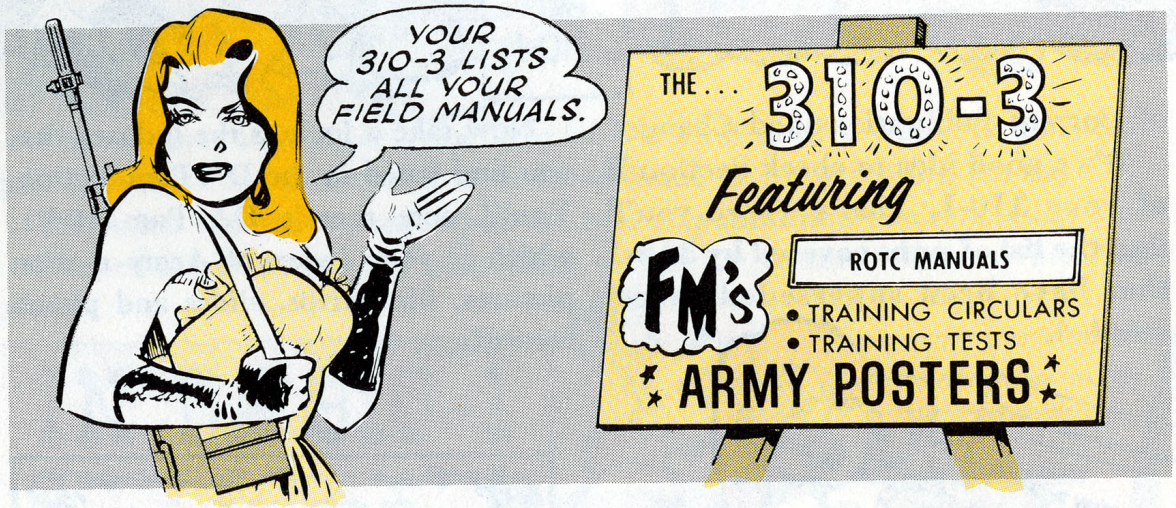
DA, DA AGO, WD, WD AGO, DD, SF FORMS AND DA LABELS

DA Pam 310-2 is your index of blank forms. You find DA, DD, SF forms and DA labels. Then you'll find some old type forms listed such as WD, WD AGO, and DA AGO. There's one thing to keep in mind when ordering blank forms. You don't have to figure out which is a DA or WD, etc., because they're listed in one numerical series. All you have to do is ask for the DA Form you want, and if it's a WD or DA AGO form you'll still get it.

PS MORE

310-3

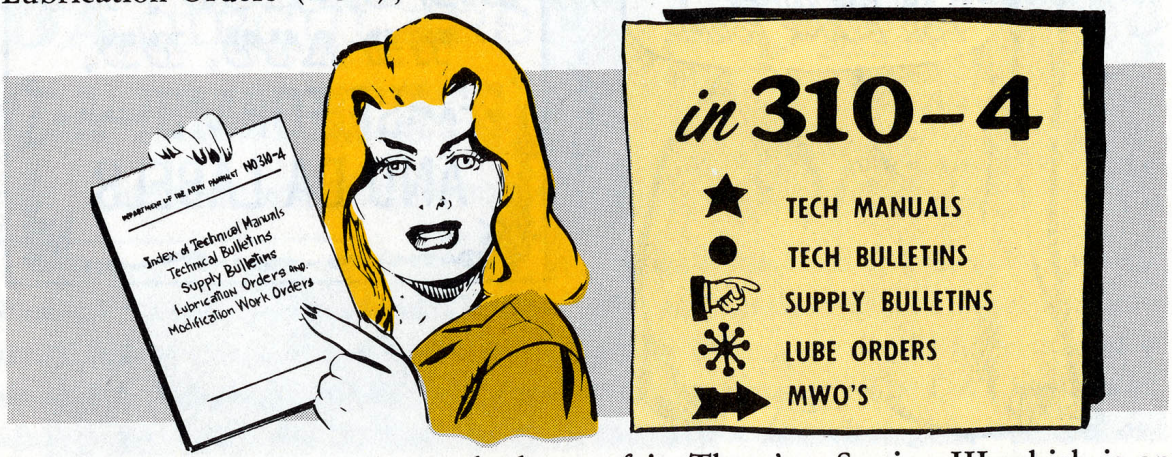
You know what Field Manuals (FM's) are. They give you military doctrine, tactics, and techniques. They give you information, instructions, and reference material on military training and operations.



Your DA Pam 310-3 lists your FM's, ROTC Manuals, Training Circulars, Army Training Programs, Army Subject Schedules, Army Training Tests, War Department and Department of the Army Posters, and Firing Tables and Trajectory Charts.

310-4

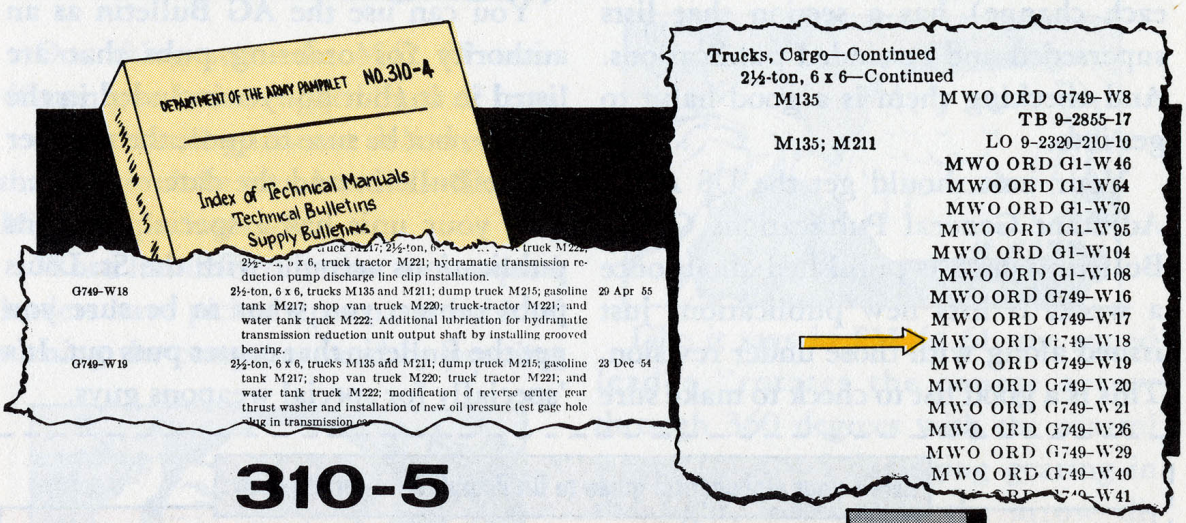
One of the most important indexes is your DA Pam 310-4 or your index of Technical Manuals (TM's), Technical Bulletins (TB's), Supply Bulletins (SB's), Lubrication Orders (LO's), and Modification Work Orders (MWO's).



It's easy to use once you get the hang of it. There's a Section III which is an alphabetical index toward the back of the book. Start with the official nomenclature of the item, if you don't find it listed then try other names that might apply. Once you find the subject, then you'll also find the pubs that have to do with it. When you need the titles of the pubs, or in the case of MWO's a little more info about them, you turn to Section I of the index.

Say you have a GMC and want to know what pubs have been printed on it. Turn to the page in Section III of your DA Pam 310-4 that lists Truck Cargo, 2½-ton, 6x6, and there you'll find M135. You find a list of pubs and now you want to know just what that MWO ORD G749-W18 is about. You turn to Ordnance MWO's in Section I. You find MWO ORD G749-W18 and it tells you that the MWO has to do with installation of a grooved bearing. It was published in Apr 55.

There's another thing to remember. This is the index that also lists your repair parts and special tool TM's or some people call them the "P" (Parts) TM's.



310-5

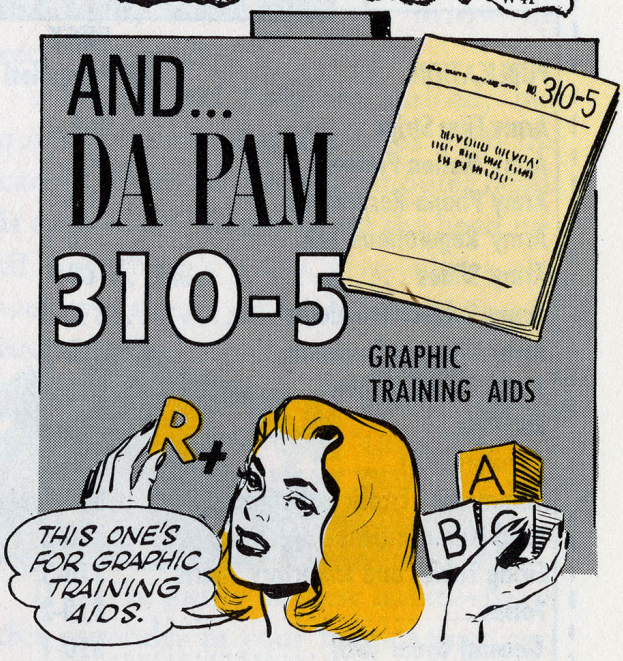
The DA Pam 310-5 is an index to Graphic Training Aids (GTA's) and Devices.

Your index for Tables of Organization and Equipment (TOE), Tables of Distribution (TD), and Tables of Allowances (TA) are in DA Pam 310-7.

Maybe you've been running into trouble trying to find parts for your equipment. You've been ordering by your SNL 7's but you find that the numbers are no good.

To save you from running into trouble like that in the future, you can do some checking.

You'll need the indexes to supply manuals. Each tech service has its own DA Pam which lists its supply manuals. It'll be easier for you when you know the number that belongs to each tech services' DA pamphlets: Chemical, 310-23; Engineer, 310-25; Medical, 310-28; Ordnance, 310-29; Quartermaster, 310-30; Signal, 310-21; Transportation, 310-22.



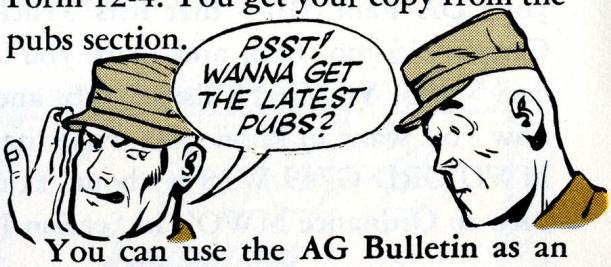
PS MORE

Now it's real important that you get into the habit of looking at the list of superseded and rescinded supply manuals. Maybe you'll find a pub listed there that you've been looking all over for. If the supply manual's been superseded by a "P" TM, it will tell you which one.

Don't forget, each DA Pam (and each change) has a section that lists superseded and rescinded publications. And checking them is a good habit to get into.

Your unit should get the US Army Adjutant General Publications Center Bulletin which is published about once a week. It lists new publications just issued along with those under revision. This is a good list to check to make sure you're getting the latest DA Pamphlets.

Your installation's publications section orders the AG Bulletin on a DA Form 12-4. You get your copy from the pubs section.



You can use the AG Bulletin as an authority for ordering pubs that are listed in it (but not yet included in the index), but be sure to quote the number of the Bulletin and the date.

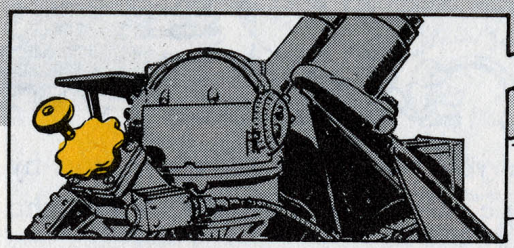
If your unit has a special weapons publications account with the St. Louis pubs center, you want to be sure you get the Bulletin that center puts out. It's 'specially for special weapons guys.

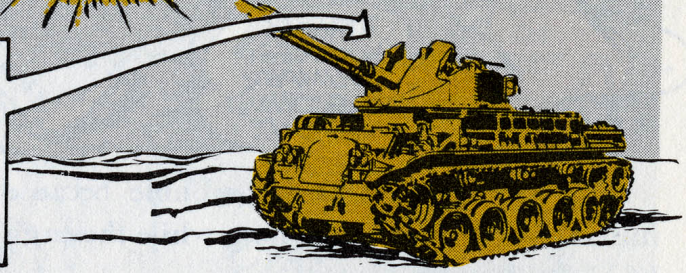
Here's your alphabetical guide to DA Pamphlets. Keep it handy.

PUBLICATION	INDEX (DA Pamphlet)
Army Film Strips	108-1
Army Motion Pictures	108-1
Army Phono-Recordings	108-1
Army Regulations (AR)	310-1
Army Slides	108-1
Army Subject Schedules	310-3
Army Training Programs	310-3
Army Training Tests	310-3
Bulletins	310-1
Circulars (DA)	310-1
Commercial Traffic Bulletins	310-1
Field Manuals (FM)	310-3
Firing Tables and Trajectory Charts	310-3
Forms	310-2
General Order (GO)	310-1
Graphic Training Aids and Devices	310-5
Joint Chiefs of Staff Publications	310-1
Lubrication Orders (LO)	310-4
Military Traffic Management Bulletins	310-1
Modification Work Orders (MWO)	310-4
Pamphlets (DA)	310-1
Posters (WD and DA)	310-3
ROTC Manuals	310-3
Supply Manuals (SM)	
Army Medical Service	310-28
Chemical Corps	310-23
Corps of Engineers	310-25
Ordance Corps	310-29
Quartermaster Corps	310-30
Signal Corps	310-21
Transportation Corps	310-22
Special Regulations (SR)	310-1
Supply Bulletins (SB)	310-4
Tables of Allowances (TA)	310-7
Tables of Organization and Equipment (TOE)	310-7
Technical Bulletins (TB)	310-4
Technical Manuals (TM)	310-4
Training Circulars (TC)	310-3
Type Tables of Distribution (TD)	310-7

Connie Rodd's "SHORT 'N SWEET DEPT"

Break those bad habits





One thing sure—the M42 SP twin 40-mm gun is one rugged hunk of iron.

But it's still got some delicate parts that just can't be man-handled—like the M38 computing sight.

Word has drifted in that some squad leaders have picked up a nasty habit of turning the computer head by pushing

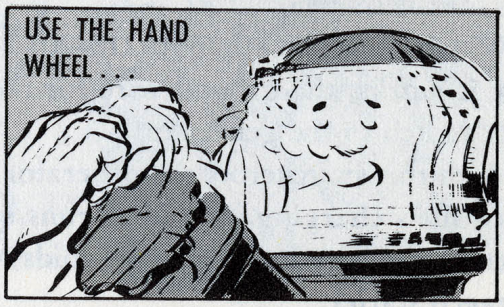
HEY! DON'T MOVE HIM BY HIS EARS

on the speed knobs—instead of using the computer positioning handwheel to get on target in a hurry.

Using the speed knobs like that puts too much strain on the differential spider assembly—sooner or later you'll shear the pin holding the unit in place.

It's like yanking on your ears to turn your head every time a pretty doll swishes by—you'd end up with a mighty stiff neck and jug ears in no time flat.

The handwheel—like the neck—is the gadget that turns the head. So use it and spare those pins.

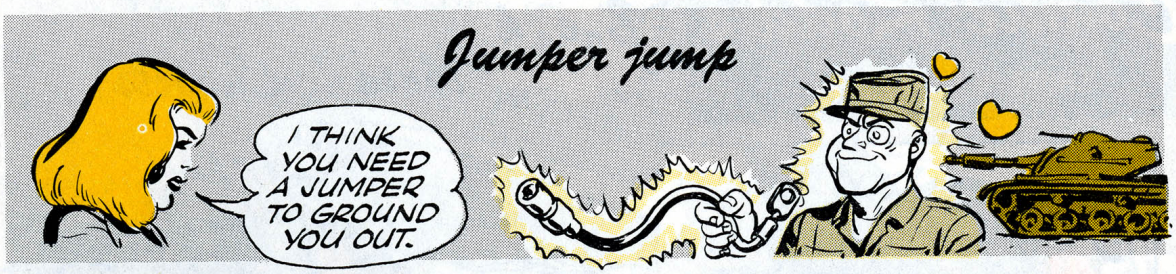


Like it says in FM 44-61, the squad leader "rotates the course arrow through 360 degrees with the control wheel (to avoid damaging gearing in the sight, never turn the arrow directly by hand)."

Another bad habit to unload, but quick, is traversing the guns with the canvas cover still on the computer head. It twists and binds around the head until something's gotta give—either the same pin shears off or the cover rips, or both.

If you're guilty of these habits—paste this reminder in your helmet liner and stop giving the computer a bad time.

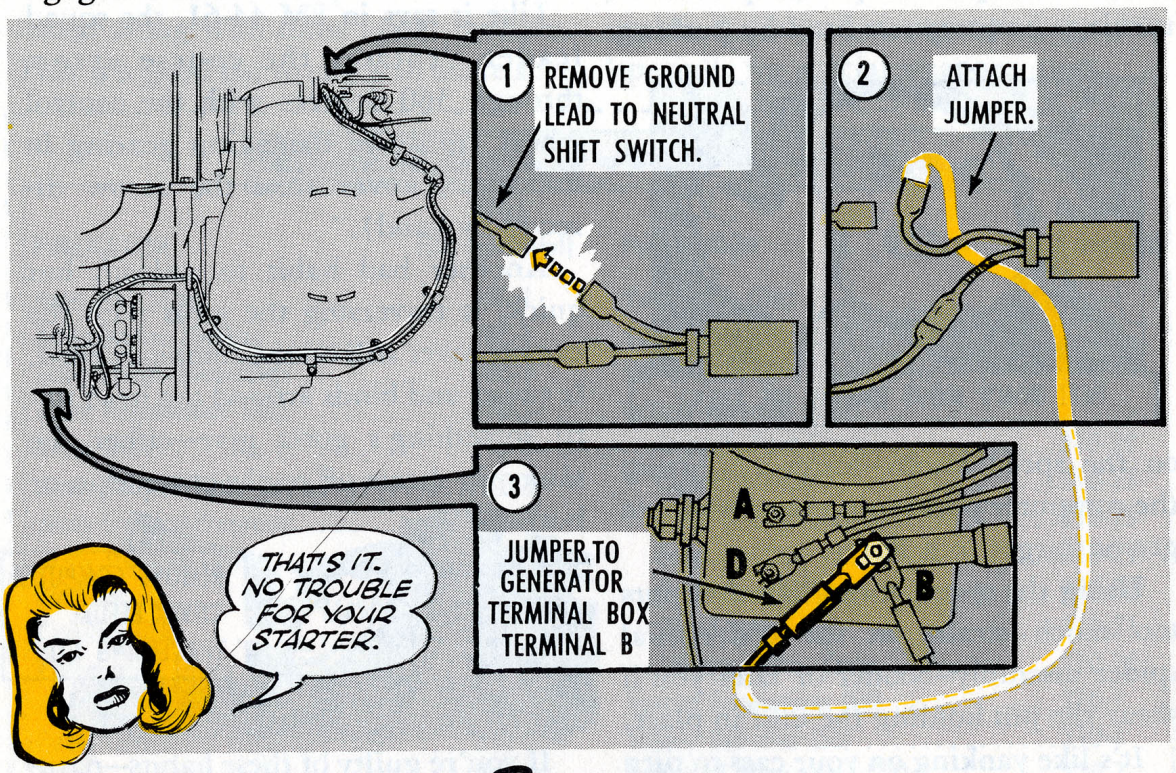
USE THE HANDWHEEL WHEN CHANGING COURSE HEADINGS. REMOVE THE COMPUTER COVER BEFORE TRAVERSING.



You M60 tankers having trouble because you punch the starter button by mistake—or hold it in too long while the engine's already running? This is mucho bad for the starter.

Watch for MWO 9-2350-215-20/7 (14 Dec 61). It'll solve the problem. The way it works, the ground wire for the starter button is moved from the neutral shift switch to the generator.

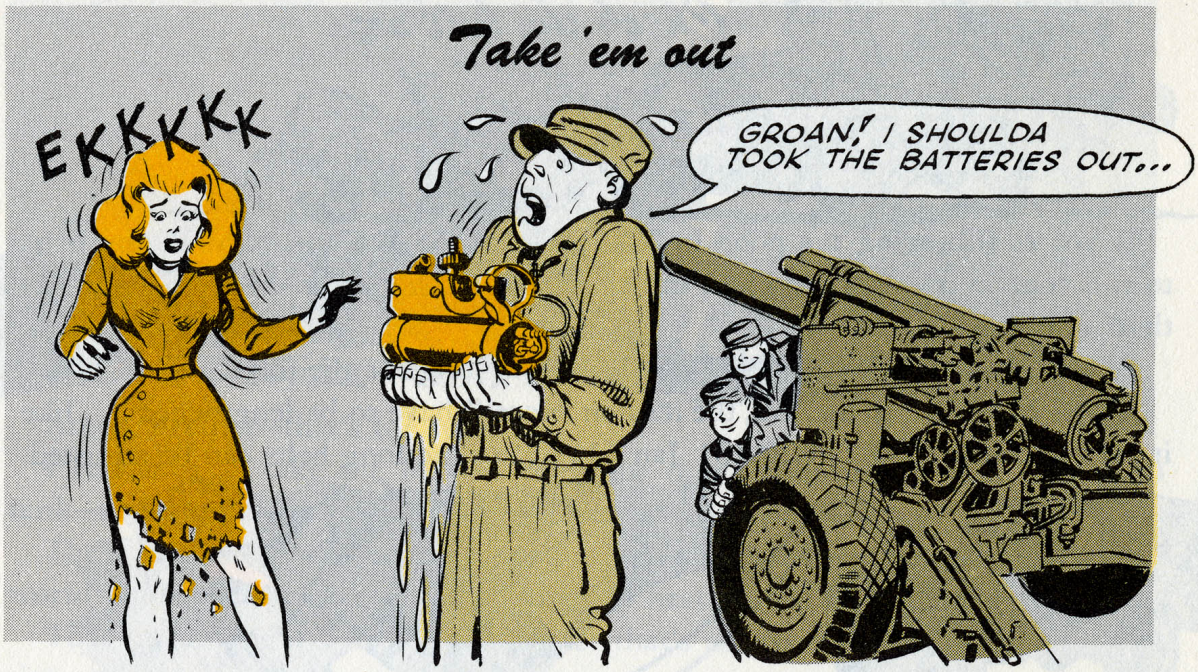
With this switcheroo, the generator acts as a ground — until it starts to charge Once she's charging, her juice runs smack dab into the juice coming from the starter switch and neutralizes (voids) the circuit . . . no more ground . . . a disengaged starter.



Box paint

Here's the latest paint for your rig's battery box: Coating compound, bituminous, solvent type, FSN 8030-290-5141 (Eng). That number'll get you a 1-gal can. And that's the right dope, even tho SM 5-1-C5-1-SL (1 May 61) says it's for ammo. Before you paint, use bicarb (baking soda) to neutralize acid and plenty of water to clean the box.

Take 'em out



If you don't believe it . . . get hold of a copy of TM 9-575 and its Change 1.

It says in paragraph 16 of the TM and the change to the TM that you're not supposed to leave batteries in your instrument lights when you're finished using the lights.

When the battery runs down and the acid starts coming out . . . you don't want the stuff to mess up the battery container.

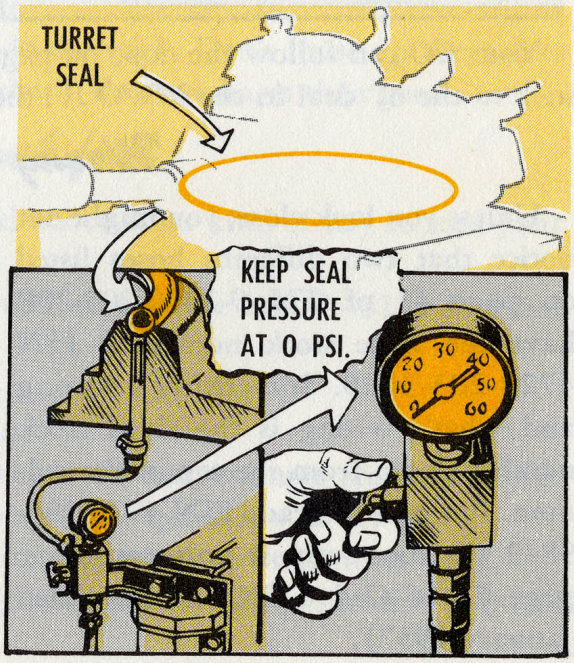
Besides . . . as Change 1 says, the batteries're not part of the instrument lights; they're simply used with them.

M 60 tank turret seal

The turret seal on your M60 tank is a mite delicate. Take care of it by keeping the pressure at O PSI **except when fording.** TM 9-2350-215-10 (June 60) says the normal operating pressure is 8 PSI or below, but the latest word is to keep it at O PSI except when fording.

In combat you can ford with a seal pressure from 5 to 7 PSI so you can traverse the turret. All other times fording is at 25 PSI **but no higher** on account of you might bust something.

If you think your gage doesn't give you an accurate reading or is from broken-downsville, have your support unit check it out.

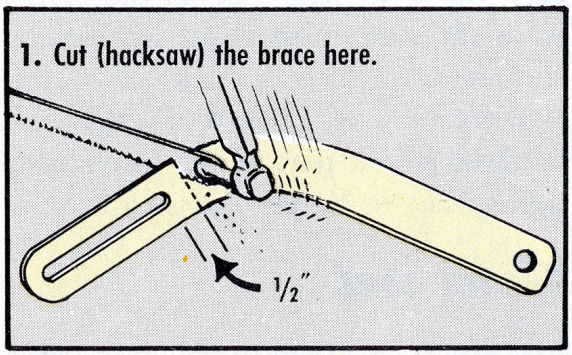


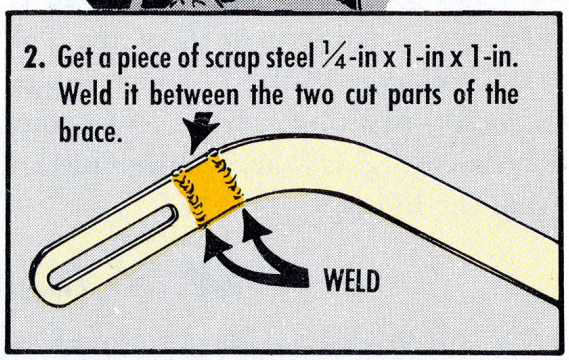
Check the belt sets

If you're following the poop in MWO Ord G758-W6 (14 Nov 56) on belts to run your jeep's 100-amp charging system, you'd better be eyein' the belt sets that supply gives you.

Some belt sets, FSN 3030-517-0827, are too long for the job.

This means that, to use 'em, the tension brace'll have to be lengthened . . . like it says in TB 9-2300-233-20 (31 Jan 61) . . . so the long belts can be adjusted.

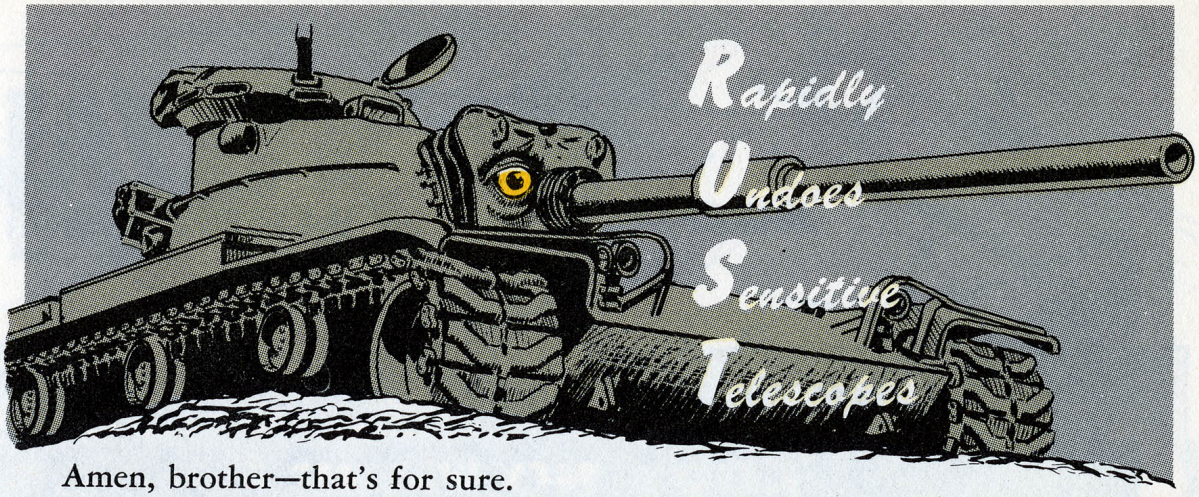




Your CO can follow the dope on page 13 of PS 86 on short belts, or he can stick to the ol' deal in the MWO . . . the choice is his.

Wrong number

Unless you look close, you might not notice that two different hoses listed on page 45 of TM 9-2300-203-20P have the same stock number — FSN 4720-203-3029. Something's wrong and what's wrong is the third stock number down from the top of the column. It wants to read: FSN 4720-288-9842 (as your support unit can see on page 74 of Ord 8 SNL G280, dated January 1957).



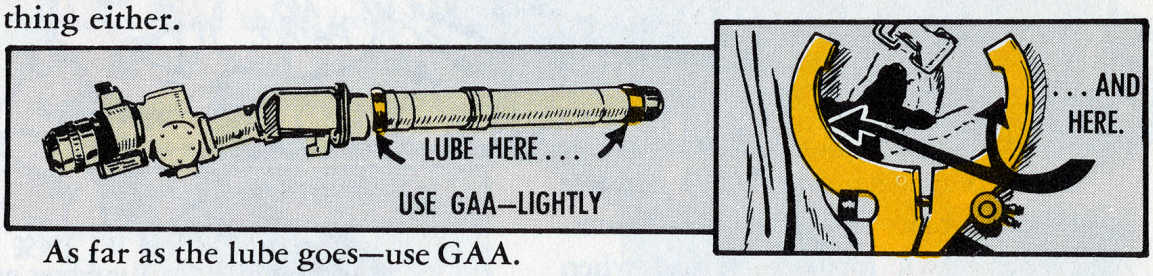
Amen, brother—that's for sure.

F'rinstance . . . take the M105C telescope that's mounted in your new M60 tank—and **any** telescope in **any** tank faces the same problem!

The front end of the 'scope sticks through the gun shield into the cold, cold world while the eyepiece end is soaking up heat on the inside.

That makes for a hot and cold street that's an excellent path for condensation—and its brother in crime, rust.

The best dose of PM you can dish out is to throw up a road block . . . smear a thin coat of lube on the spherical mounting surfaces on the telescope . . . and a little lube spread on the inside jaws of the M114 mount won't exactly hurt anything either.



As far as the lube goes—use GAA.

But remember—a **light** coat of lube'll do the trick. Don't louse up the works by making it a gooky, fly-catching mess that'll do more harm than good.

M60 tank fuel

Any of you M60 tank jockeys confused about what kind of hay to feed your iron horse?

Page 67 of TM 9-2350-215-20 (Sept 60) says to use MIL-F-45121 fuel but page 26 of the -10 calls for V V-F-800.

V V-F-800 is right.

V V-F-800 fuel comes in different grades:

Grade DF-2, regular, is for climates where the temperatures are above 20°F.

Grade DF-1, winter, is used when temperatures get as low as -25°F.

Grade DF-A, arctic, is for places where temperatures go lower than -25°F.

See that your friendly US fuel dealer gives you the right grade of V V-F-800 to keep your M60 happy and healthy.

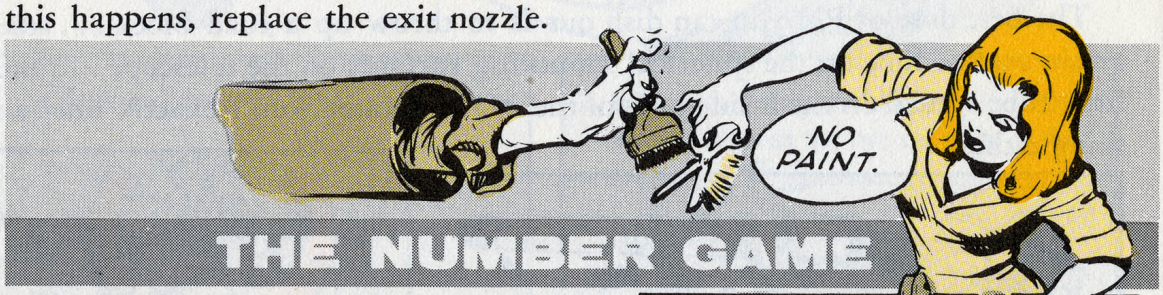
LOOK NO MORE

That is . . . if you're trying to find out what kind of paint you're supposed to use on the rokhide coating inside your Hawk missile exit nozzle.

The rokhide liner doesn't get a sniff of paint.

So maybe the liner is discolored. Don't worry about it . . . and don't paint it.

The thing you want to look out for is flaking or chipping of the liner. When this happens, replace the exit nozzle.



THE NUMBER GAME

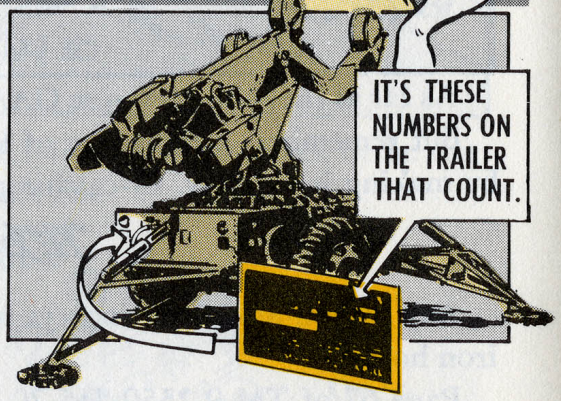
Scuttlebutt has it that there's no little confusion about just what serial number you Hawk missilemen use when you log your XM78E3 launcher on DA Form 478.

The mixup stems from the fact that both the boom support and the trailer base of the launcher have serial numbers on their data plates—and naturally they don't jibe.

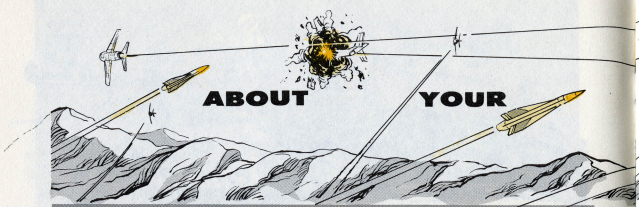
Some outfits use the numbers on the trailer and some use the numbers on the boom — making for one big SNAFU (Serial Numbers All Fouled Up).

Here's the word—

It's the serial number on the trailer that counts, as far as the records are concerned.



The trailer base, boom and boom support all go together to form the XM78E3 launcher. So the boom support loses all identity when it forms the launcher, and it's the serial number of the launcher itself—not its component parts—that gets entered on the DA Form 478.



LOOK NO MORE

That is . . . if you're trying to find out what kind of paint you're supposed to use on the rokhide coating inside your Hawk missile exit nozzle.

The rokhide liner doesn't get a sniff of paint.

So maybe the liner is discolored. Don't worry about it . . . and don't paint it.

The thing you want to look out for is flaking or chipping of the liner. When this happens, replace the exit nozzle.

THE NUMBER GAME

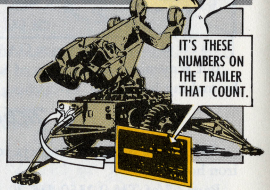
Scuttlebutt has it that there's no little confusion about just what serial number you Hawk missilemen use when you log your XM78E3 launcher on DA Form 478.

The mixup stems from the fact that both the boom support and the trailer base of the launcher have serial numbers on their data plates—and naturally they don't jibe.

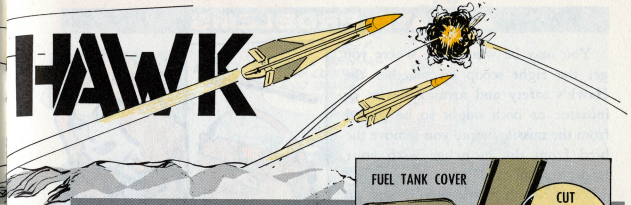
Some outfits use the numbers on the trailer and some use the numbers on the boom — making for one big SNAFU (Serial Numbers All Fouled Up).

Here's the word—

It's the serial number on the trailer that counts, as far as the records are concerned.



The trailer base, boom and boom support all go together to form the XM78E3 launcher. So the boom support loses all identity when it forms the launcher, and it's the serial number of the launcher itself—not its component parts—that gets entered on the DA Form 478.

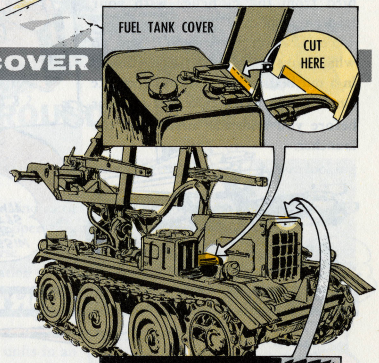


CUT THE COVER

There're them that do . . . and there're them that don't.

Them that don't are OK. But you want to give some attention to the XM501E1 and XM501E2 Hawk loader-transporters that have fuel tank cover troubles. And those troubles are the kind where the bottom edge of the cover rubs against the fuel line when you open and close the cover.

The thing to do is have your support unit cut away a ¾-in piece of the cover.



A COVER, NOT A SEAT

There's nothing in any TM about it —but no guy is gonna sit on a hot engine cover—unless he wants to pick up a few blisters. There sure are easier ways to get put on sick call.

And when it comes to XM501E1 and XM501E2 Hawk loader-transporter, it's a smart guy who doesn't sit on the engine compartment cover — whether it's hot or cold. And he doesn't walk on it, either.

The reason's simple enough — the cover's not built to take any kind of load.

But—seeing's believing . . . so stencil these words in white paint on the cover: "No Seat-No Step."

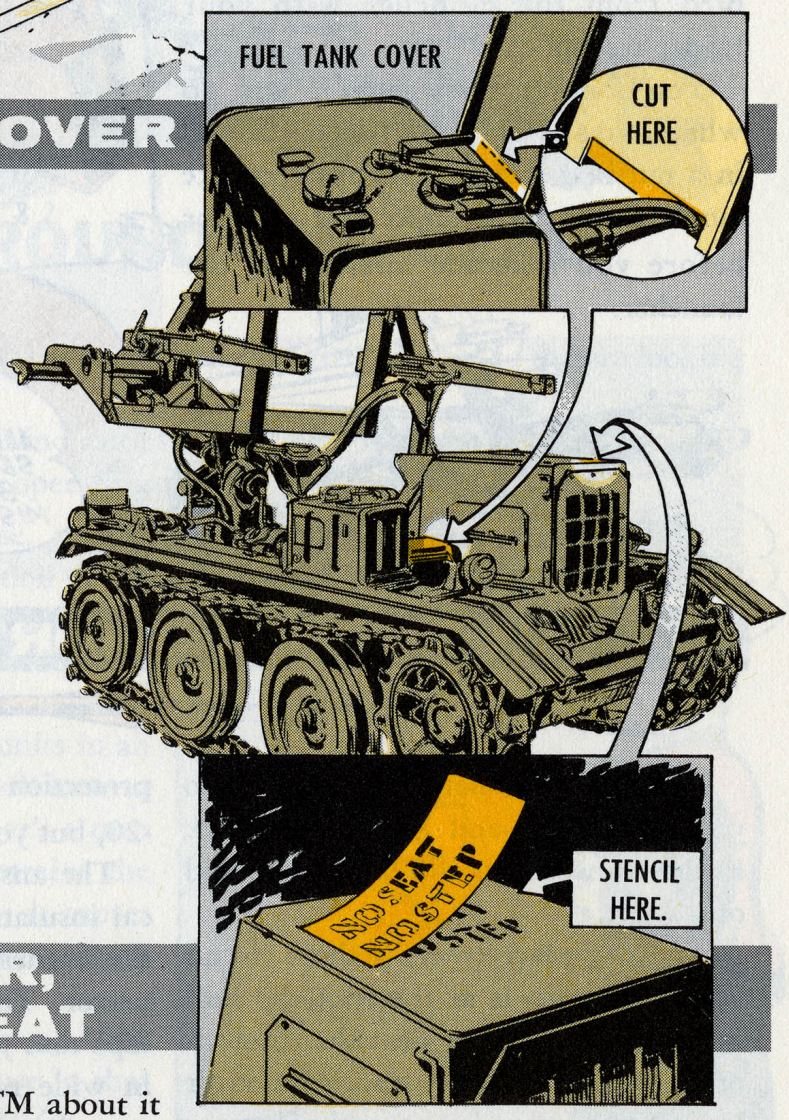
HAWK

CUT THE COVER

There're them that do . . . and there're them that don't.

Them that don't are OK. But you want to give some attention to the XM501E1 and XM501E2 Hawk loader-transporters that have fuel tank cover troubles. And those troubles are the kind where the bottom edge of the cover rubs against the fuel line when you open and close the cover.

The thing to do is have your support unit cut away a ¾-in piece of the cover.



A COVER, NOT A SEAT

There's nothing in any TM about it —but no guy is gonna sit on a hot engine cover—unless he wants to pick up a few blisters. There sure are easier ways to get put on sick call.

And when it comes to XM501E1 and XM501E2 Hawk loader-transporter, it's a smart guy who doesn't sit on the engine compartment cover — whether it's hot or cold. And he doesn't walk on it, either.

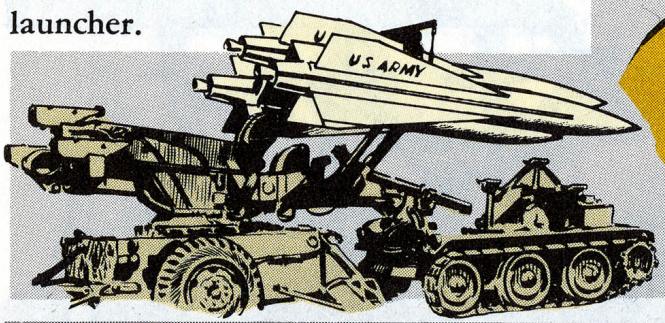
The reason's simple enough — the cover's not built to take any kind of load.

But—seeing's believing . . . so stencil these words in white paint on the cover: "No Seat-No Step."

ALWAYS PROBLEMS

You may be wondering where you get the right scoop on whether the Hawk's safety and arming device or initiator or both ought to be pulled from the missile before you remove the bird from the launcher with your loader-transporter?

You'll never go wrong if you do what it says in TM 9-1410-500-12. And in a nutshell . . . the TM says you take out both the S&A device and initiator before you take the missile off the launcher.



LONG ON SHORTS?

If you want to help give long life to your XM501E1 and XM501E2 Hawk loader-transporter, you have to get rid of a short.

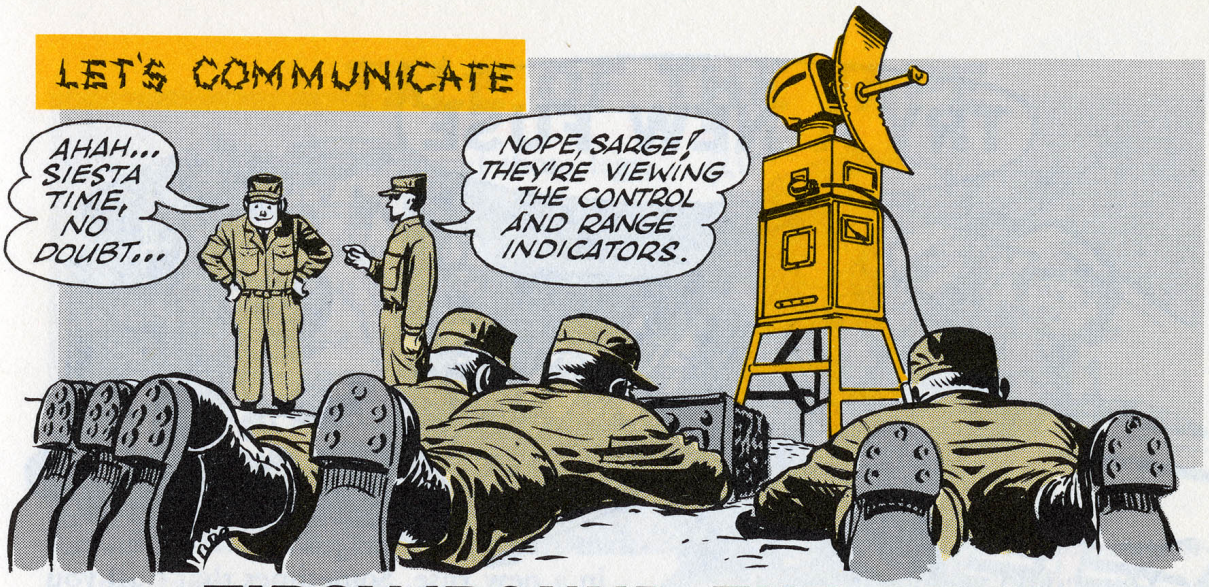
And one place where a short circuit is cropping up is at the spot the hull main harness rubs against the connector on the end of the hydraulic reservoir line. You know . . . near the battery cable.

The rubbing is set up by engine vibration and seeing's how you're not going to get rid of the vibration or the harness, the best thing to do is give the harness some protection.

You won't find the answer to the protection in TM 9-1450-500-10 or -20, but you will by reading on.

The answer is to wrap some electrical insulation tape around any part of the harness that rubs against the connector. The Signal people have some tape that you can use—say maybe a ¾-in wide roll of black cotton adhesive tape that comes under FSN 5970-184-2003. Then . . . there's also a ½-in wide roll of plastic tape that'll work. It goes by the number, FSN 5970-644-2636.

And you don't want to put the tape away until you've checked for other chafed wiring.



TIPSY 'ROUND THE BEND

True. True.

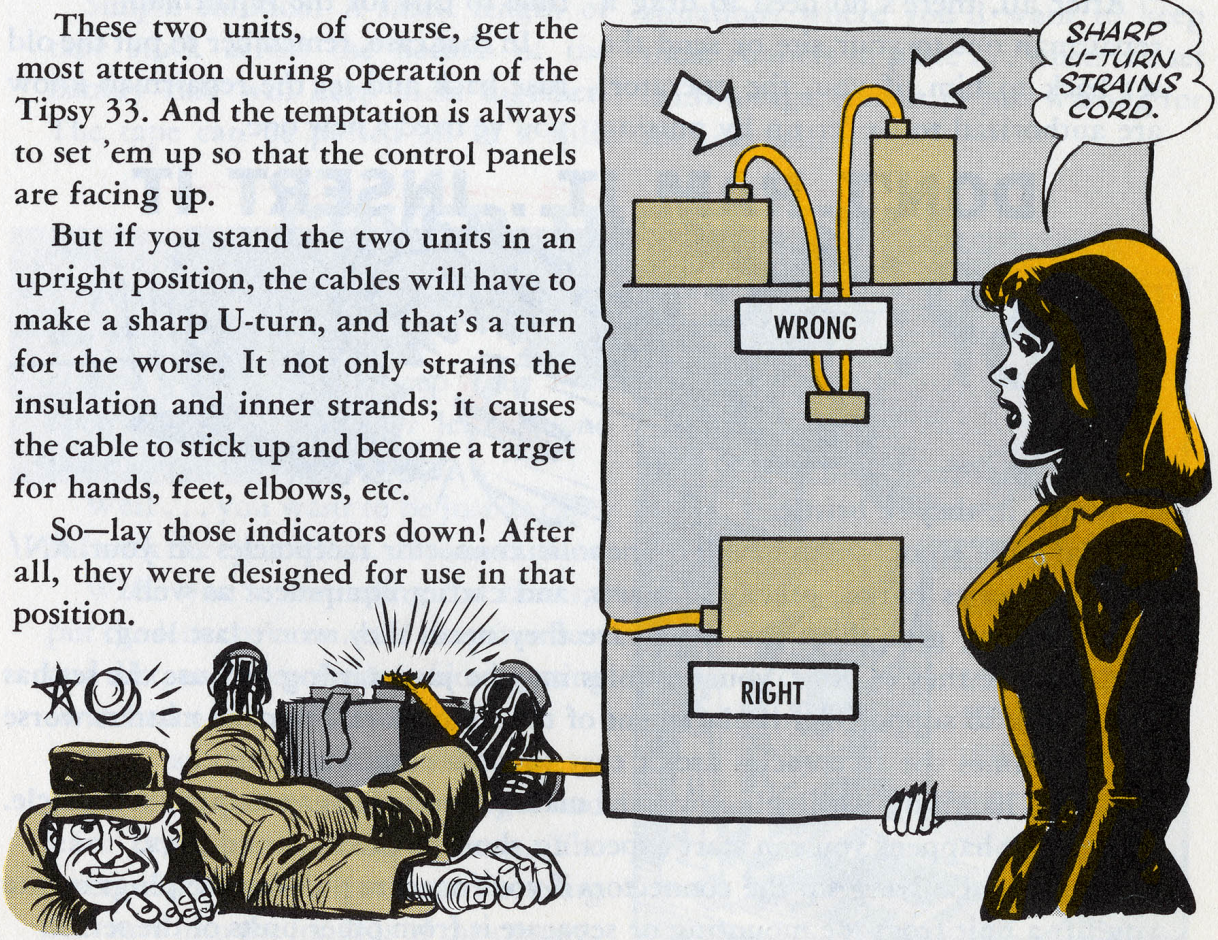
It seems easier to position those control and range indicators so they're looking up at you.

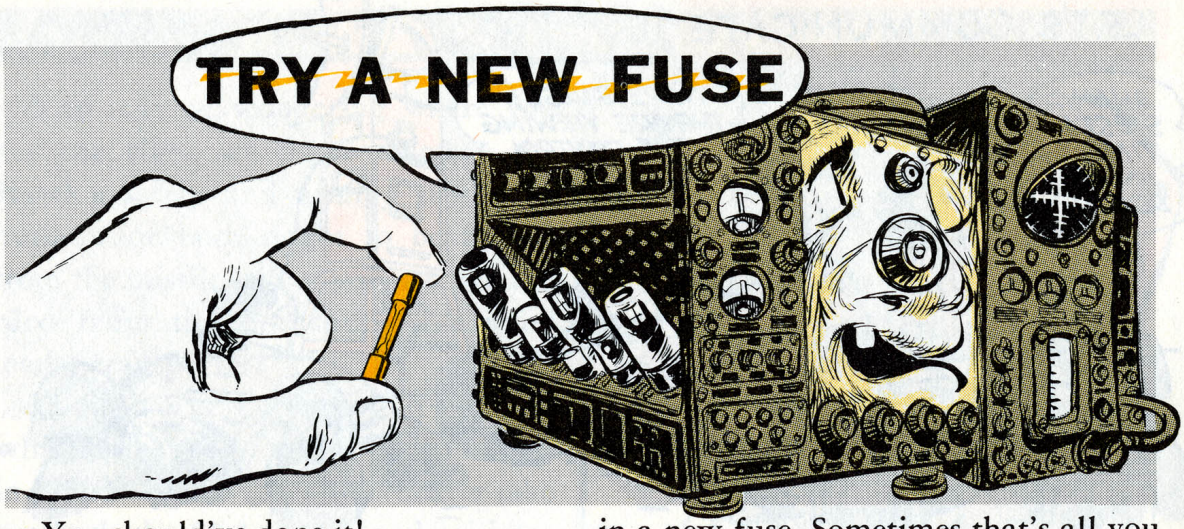
Talking about the control-indicator C-3342/TPS-33 and range-indicator IP-553/TPS-33 that you use in operating the AN/TPS-33 radar set.

These two units, of course, get the most attention during operation of the Tipsy 33. And the temptation is always to set 'em up so that the control panels are facing up.

But if you stand the two units in an upright position, the cables will have to make a sharp U-turn, and that's a turn for the worse. It not only strains the insulation and inner strands; it causes the cable to stick up and become a target for hands, feet, elbows, etc.

So—lay those indicators down! After all, they were designed for use in that position.





You should've done it!

Coming from a support man, these words can give an operator fits.

They remind him that when his set conks out, he should pull a spare fuse from the spares carried on the set or its accessory kit.

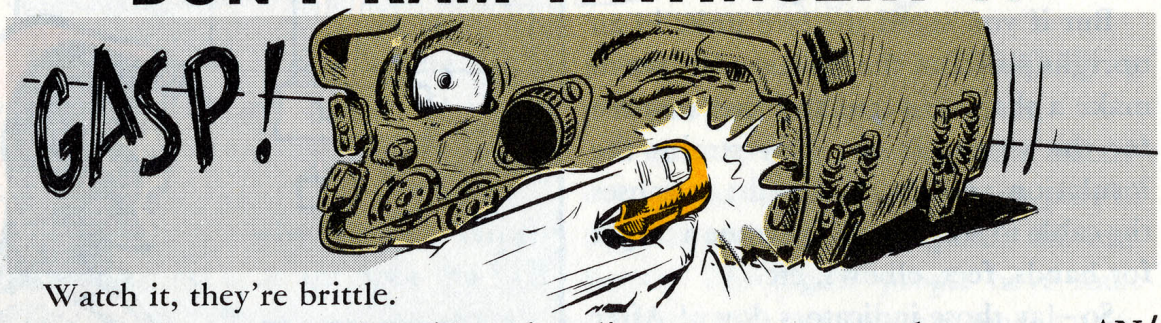
After all, there's no need to drag a repairman out to your site or send the set back to him, if you, the operator, are authorized to fix 'er up by putting in a new fuse. Sometimes that's all you need.

When you replace a fuse, make sure the one you put in has the same ampere rating as the one you take out.

Of course, if the new fuse doesn't bring life back into your set, then it's time to call for the repairman.

In that case, remember to put the old fuse back and let the repairman know you've tried a new one.

DON'T RAM IT...INSERT IT



Watch it, they're brittle.

That's the scoop on those blue phenolic connector receptacles on your AN/GRC-3-8 series radios, other radio sets, and carrier equipment as well.

Unless you give them the little care they need, they won't last long.

And, once they're gone, your troubles may be just starting because the set has to go back to support for replacement of the connectors. To make matters worse . . . sometimes the receptacles aren't easy to latch onto, even there.

Rough handling while plugging the male connector in can chip the receptacle. When that happens you can start expecting short circuits . . . and gigs.

You can also bang up the connectors if you forget to pull out the plugs before you lift a unit from the mounting or separate it from other units of the set.

TALE OF THE TAPE

There's a time to spread those legs, and a time to keep 'em together.

F'rinstance: when you're setting up your AN/PRC-10 for field operation, you want to spread those legs—or runners—far enough so your Perk 10 will stand up and stand ready.

On the other hand, when the word is passed to form up and move out, you slap those legs together and start making tracks.

That's when the legs, or runners, can get in your way. They have a habit of swinging loose and not staying snug and close to the bottom of the battery case. They can snag on something or maybe rip something.

Simple solution. A small length of tape stuck across the bottom of the battery case will keep them together. The tape can be peeled off in a split second if necessary, and can be used over again.

Come to think of it, there're other situations where you'll want to keep those runners in place . . . when the set is in storage, transit, or just waiting for the next call.

COVER THOSE EYES

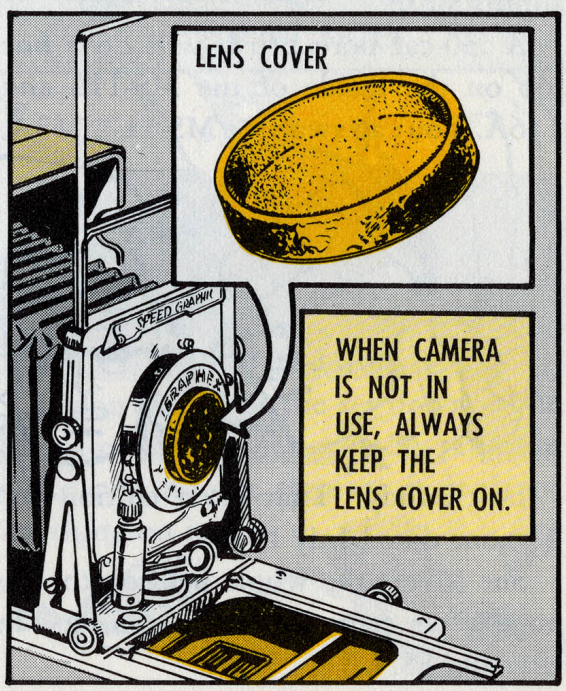
You couldn't stand looking into the sun very long, could you?

And you wouldn't keep your eyes open in a dust swirl. Or let someone poke you in the eye!

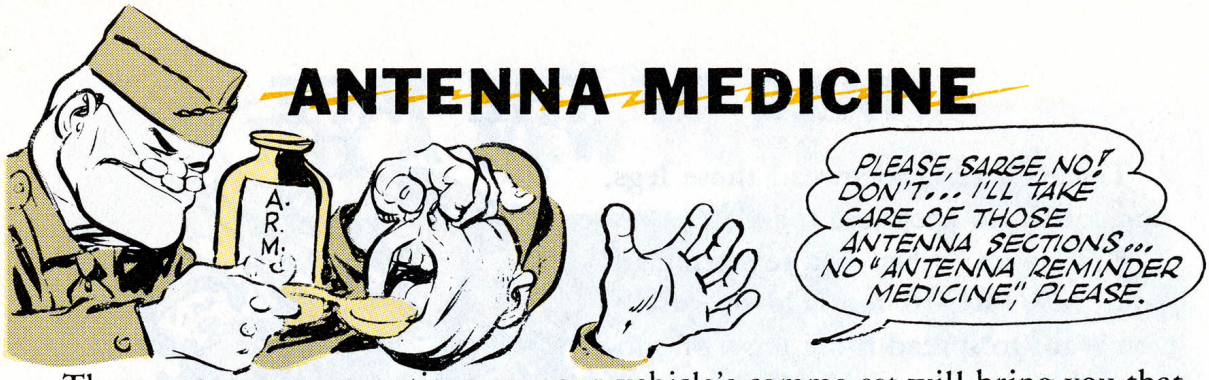
Well . . . you want to be just as careful with the eye, or lens, of your camera.

When you're not using the camera, put the lens cover on. It'll keep out dust and dirt, and keep the lens from getting scratched or bumped.

And, as the insurance men say, it gives added coverage if you forget and leave the camera facing the sun. The cover will keep the lens from focusing heat rays into the innards of the camera.



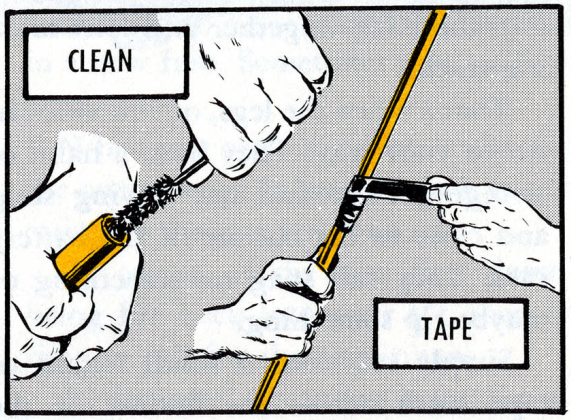
ANTENNA MEDICINE



Those antenna mast sections on your vehicle's commo set will bring you that good signal you need if you treat them right.

Like the rest of your equipment, they need a regular dose of PM. Take those sections used with the AN/GRC-3-8 series radio sets, f'rinstance. When used for some time they can get messed up.

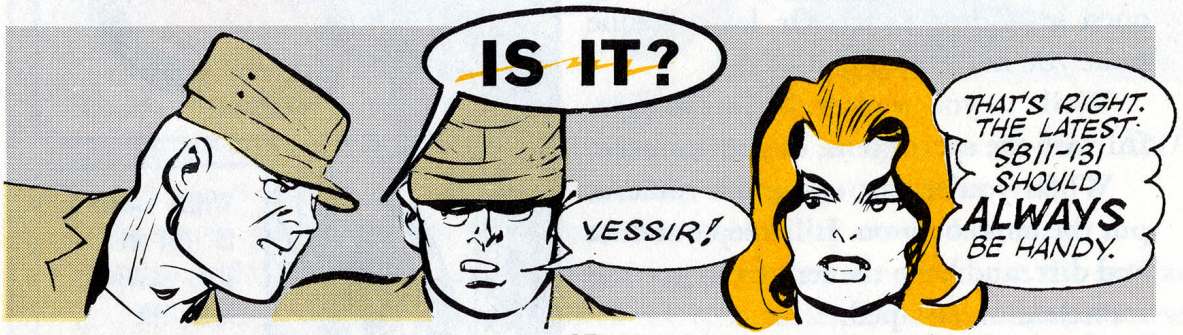
So . . . a good operator will set up a program of taking them apart, cleaning 'em, and taping their joints after they've been re-assembled. This gives you a good contact, keeps the joints from corroding and makes it easier to take the sections apart next time.



For cleaning the male end of the sections, FSN 7930-269-5270 will get you a 1-lb can of Polish, metal: paste form —for brass, nickel, copper and similar metals. You might be able to latch onto it faster if you're near a self-service supply store.

A .30-cal bore brush will do a fine job on the inside of the MS-116 and 116A. You can swab the MS-117, 117A, 118, or 118A with a clean, dry cloth.

Before putting the antenna back on your vehicle, wrap a turn or three of any good black plastic insulating tape around the joints. Because it can be stretched tight, rubber insulating tape will give you a better seal. But, in a pinch, masking tape will do the job.



Is it handy? That latest edition of SB 11-131 sure ought to be close at hand. The one dated July 1961.

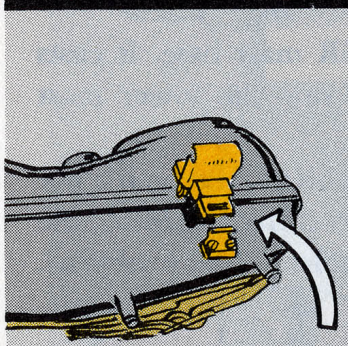
She covers the whole field on the distribution of vehicular radio sets and lists page after page of the matching "Installation Instructions"... complete with title and FSN.

WATCH THOSE TURNS

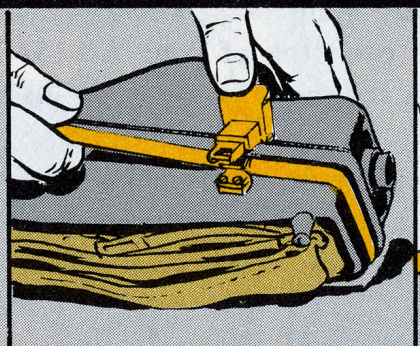
It's the last little turn that does it . . .

Yes, it's when you try to put the flexible whip antenna for your AN/PRC-6 through that last latch that it picks up a permanent kink or twist . . . or breaks.

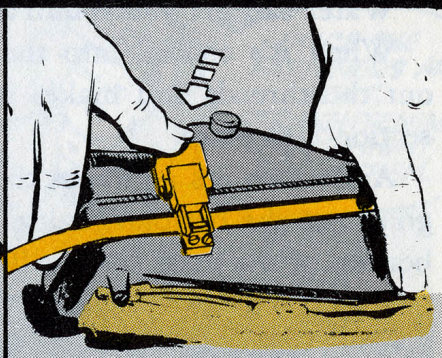
So, instead of trying to slide the antenna under the closed latches, try this:



OPEN THE LATCHES.

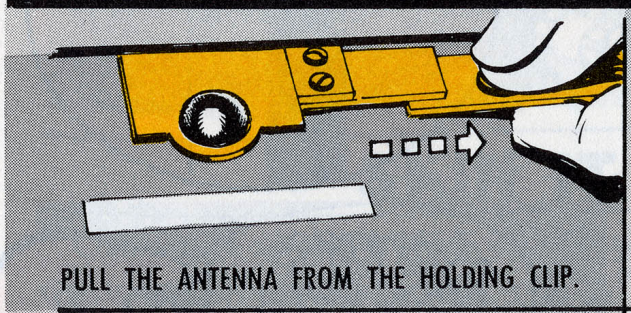


WRAP THE ANTENNA AROUND.

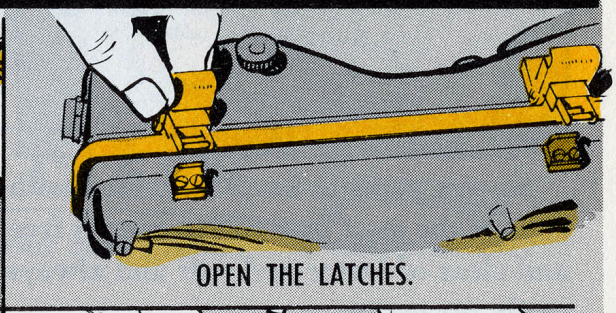


CLOSE THE LATCHES AS YOU GO.

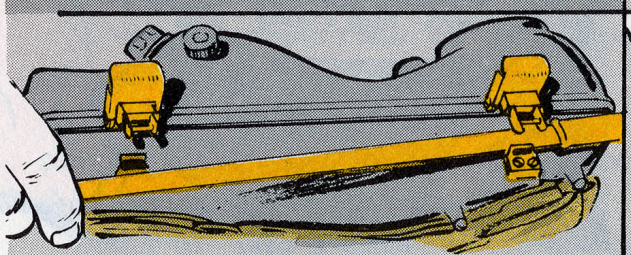
To remove the antenna:



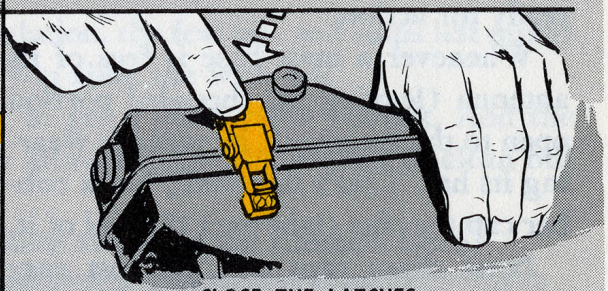
PULL THE ANTENNA FROM THE HOLDING CLIP.



OPEN THE LATCHES.



REMOVE THE ANTENNA.

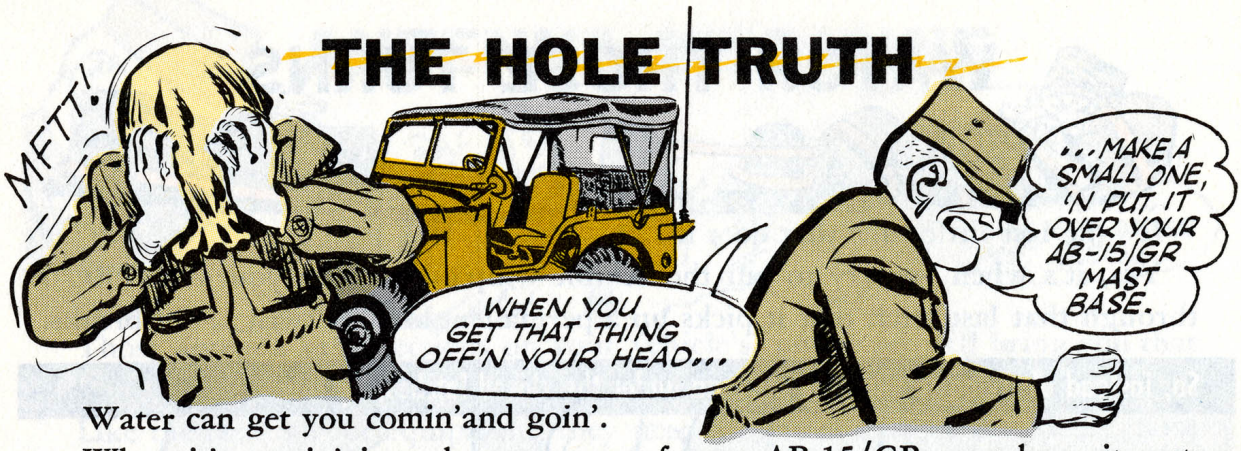


CLOSE THE LATCHES.

Another thing to keep in mind is that you can run into plenty of trouble if you try to bend the antenna into a small circle. And don't ever put anything on the antenna because even the weight of the radio set will kink it if it's left that way for a long time.

If you must put the set down while the antenna is in the operating position, make sure no one steps on it or drops anything on it.

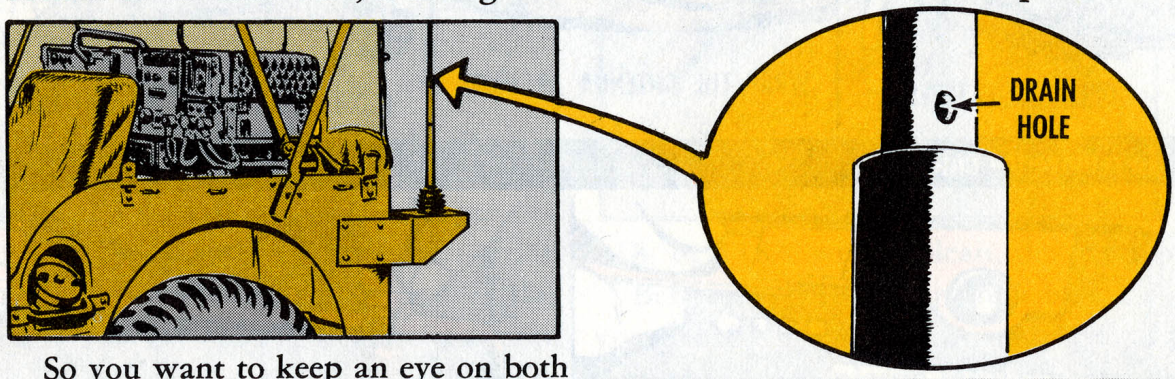
THE HOLE TRUTH



Water can get you comin'and goin'.

When it's comin' into the open top of your AB-15/GR mast base, it rusts out the threads and makes it tough—or impossible—to screw the lower mast section into place.

And when it's goin' out the bottom, well—that's the problem. Maybe it's not goin' out the bottom. 'Cause if dust and dirt and gook start collecting inside the bottom of the mast base, it'll clog those two small drain holes. More problems.



So you want to keep an eye on both ends of the mast base so's to keep it free and clear of water and rust and always ready for action.

Whenever a mast base is free of its antenna (leaving the threaded portion open to the weather), be sure it's wearing its hat. That's the small, black rubber cap that fits right over the end of it.

Now those caps can get lost easy enough, 'tis true.

And while they're not requisitionable at unit level, nothing says you can't stir up your support people to requisition a batch of 'em through their supply channels. It's known as Cap, Antenna Base: cup shape, FSN 5820-264-9213.

While you're waiting, a homemade cover of almost any waterproof fabric can be popped over the hole and secured with thin wire or heavy elastic.

Meanwhile, check those two small drain holes on either side of the AB-15. Only takes two or three seconds to clean out any gook that might have collected in them.

LINE UP

When setting up your SB-86/P field switchboard, make sure the various sections line up before you fasten them.

If they don't, you can bend their trunk-type latches by putting too much pressure on them.

And, to make matters worse, the latches tend to break when you try to straighten them.

SKIN IT CLEAN

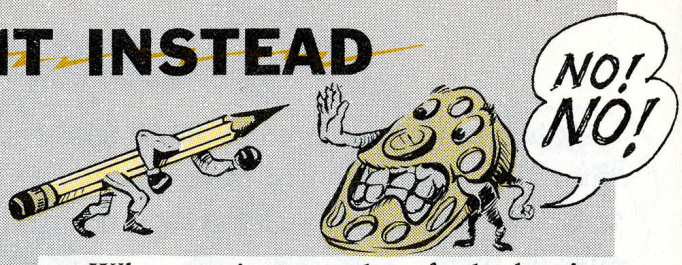
Comes time to skin a fresh wire for your field telephone or telephone carrier system and the word is to "skin it clean."

'Cause if you don't skin off all the insulation, the few bits and snips left might stick inside the binding post next time you slide the wire out

That'll make it tougher and tougher to get a good, clean contact. And the time will come when you'll have to probe around inside the contact to clean out the trapped bits of insulation.

Better to "skin it clean" in the first place and keep the contacts clean.

FINGER IT INSTEAD



When you've got a lot of telephoning to do, it's mighty tempting to dial with a pencil.

It saves you from getting a sore finger . . . but, look what it does to the dial face. The pencil point marks it. And the eraser, if used long enough, rubs out the numbers and letters.

This happens when you're dialing a switchboard such as the SB-53 ( )/FTC, SB-171/FTC, SB-257/FTC, or BD-110. And, it'll happen just as easily when you pencil dial one of those commercial-type phones with the letters and numbers under the dial.

So, to keep your (dial) face bright and fresh like Connie's. . .use your finger.

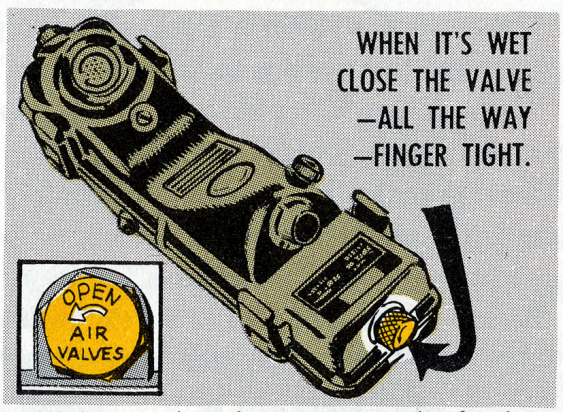
REMEMBER THE VALVE

Because it's down where the mud flies, the air valve on your AN/PRC-6 handie-talkie isn't hard to forget.

But, there're times when it should be OPEN and times when it should be CLOSED. And CLOSED means all the way to the right—finger tight.

As a general rule the valve should be closed when the set is idle, when you're fording, or when you're in the rain, snow or any other form of sweat from the "met" department.

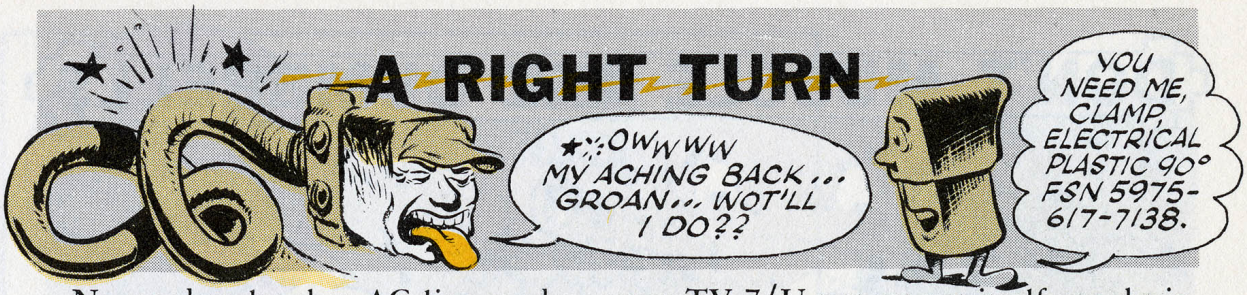
When you're getting ready to handle a message, open the valve one-half turn to the left. That'll keep pressure and heat from building up inside the case—



which can block your "Perk 6" from doing its best to get the word through.

And, open her up any time your unit is running up and down mountains where the air pressure changes fast. Then the pressure inside will be the same as outside.

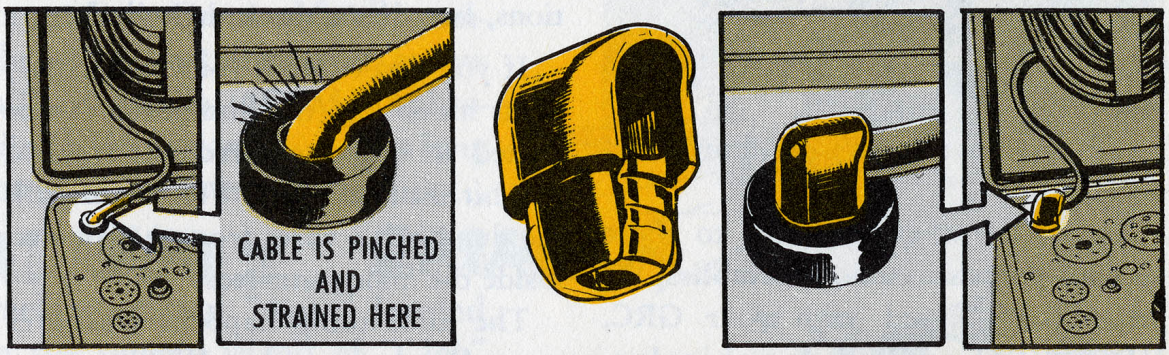
A RIGHT TURN



No need to let that AC line cord on your TV-7/U test set get itself caught in a squeeze every time you lower the lid.

Of course, if you happen to have the "D" model, there's no sweat because the nipple bends the cord out of the way for you.

But now there's a little item in the system that will do the same job for other models. It's called Clamp, electrical, plastic, 90-degree, FSN 5975-617-7138 (Sig).

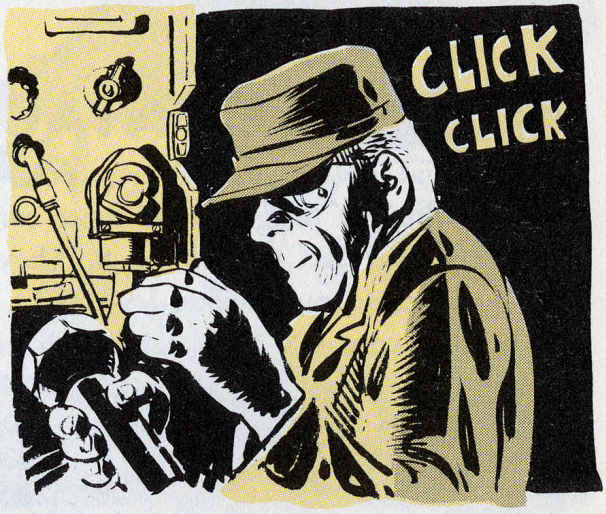


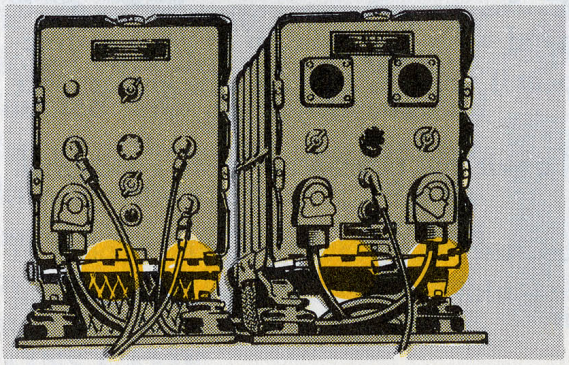
THE CLICK THAT COUNTS

It's that extra click on your MT-791/U mounting that counts for keeps.

'Cause the locking lever handle has to click down into place before you're sure the frequency shift converter CV-278/GR and MD-203 modulator are sitting tight.

Next time you're checking out your AN/GRC-46, then, look close at those two pieces of equipment. Look for that small notch at the right hand corner of the mount—as you face it.

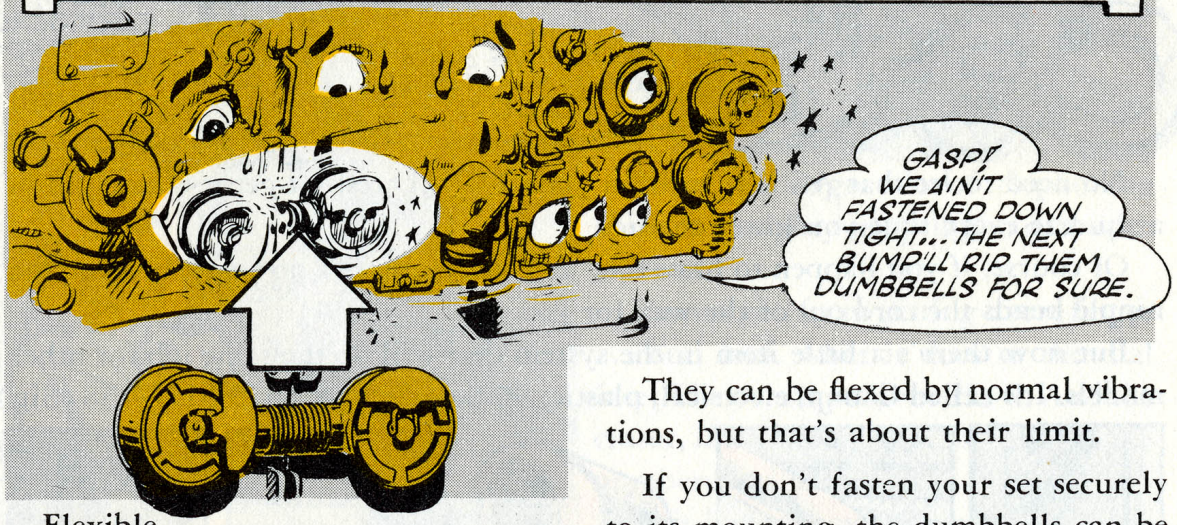




Your CV-278 and MD-203 just won't be locked up at all unless the handle of the locking lever is pulled all the way over to the right hand corner—and then dropped down into that notch.

Once she clicks into place, you're locked up and ready to roll.

DON'T MUSCLE THE DUMBBELLS



Flexible.

Yes, but that doesn't mean unbreakable.

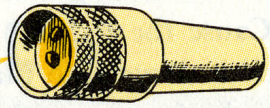
Especially when it refers to those special purpose cable assemblies, or "dumbbells," used with your GRC, VRC, VRQ and other vehicular-mounted sets. Like the CX-1211-U or CX-1213-U f'rinstance.

They can be flexed by normal vibrations, but that's about their limit.

If you don't fasten your set securely to its mounting, the dumbbells can be pulled in opposite directions soon as you hit the first bump. The strain pulls the dumbbell's wires from the contacts inside the male connector.

The same thing happens whenever some character grabs the connectors and makes like a strongman. His muscles may flex but the dumbbell won't.

CONTACT CARE



No special tools needed. Easy to pull.

That's the PM program for those contacts on the audio connectors used with radio sets AN/GRC-3 through 8. They're found on the chest set group AN/GSA-6, dynamic loudspeaker LS-166/U, handset H-33/PT, microphone M-29/U and headset cord CX-1334 used with headset Navy type CW-49507.

As for the tool, you've got it in your hand whenever you fill in your maintenance form. All you need do is turn your pencil around and rub the eraser over the contacts.

It only takes a few strokes to clean off the grit and tarnish and get a good clean contact.

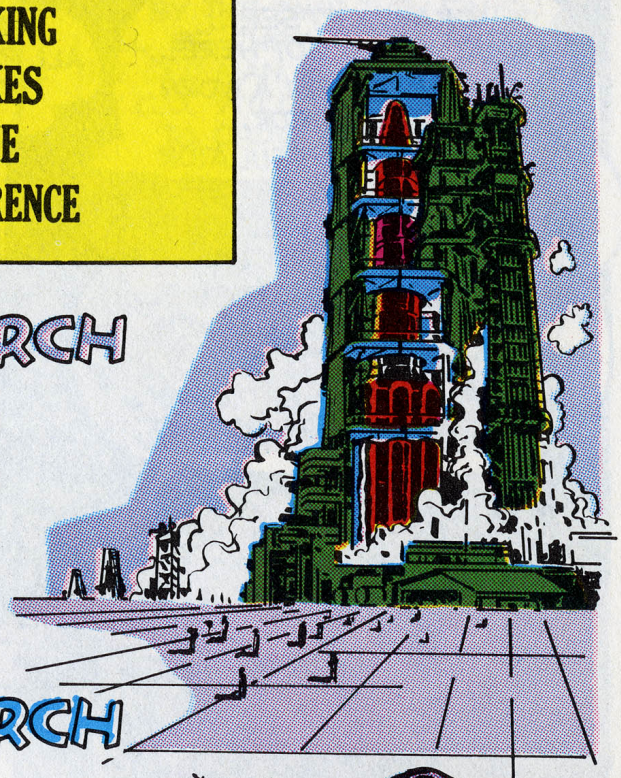
Polishes aren't always best for the job because they tend to rot the rubber in which the contacts are set. And, they leave a film which keeps you from getting the good contact you need.

JOE'S DOPE

PACKING MAKES THE DIFFERENCE

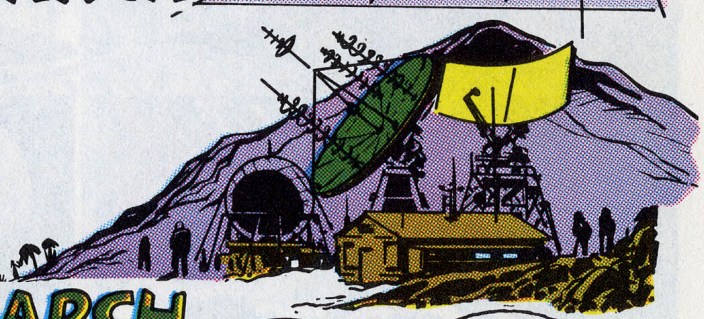
AT 1500 Z... 2 MARCH

the engineers, technicians, and the staffs of the civilian contractors at Cape Carnival finally completed the installation of a new military missile, (ICBM) "Aphrodite IV" in its gantry . . . The long complicated count-down starts...



AT 1550 Z... 2 MARCH

tracking station "Apex" located on the remote island of "Glob" 7500 miles down range, completed installation of COMPLEX telemetry and tracking antennas, and radios it was "all in the green."



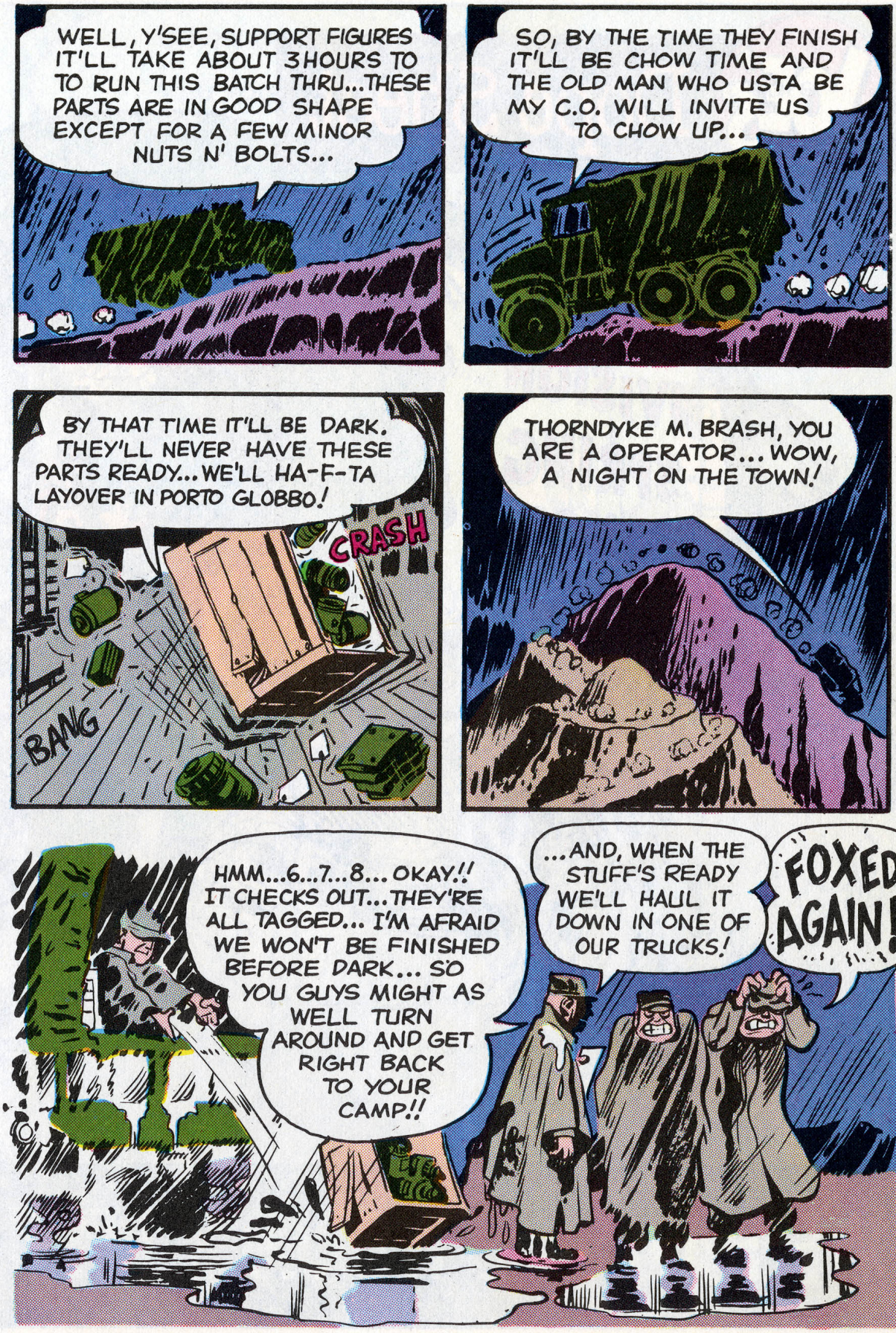
AT 1555 Z... 2 MARCH

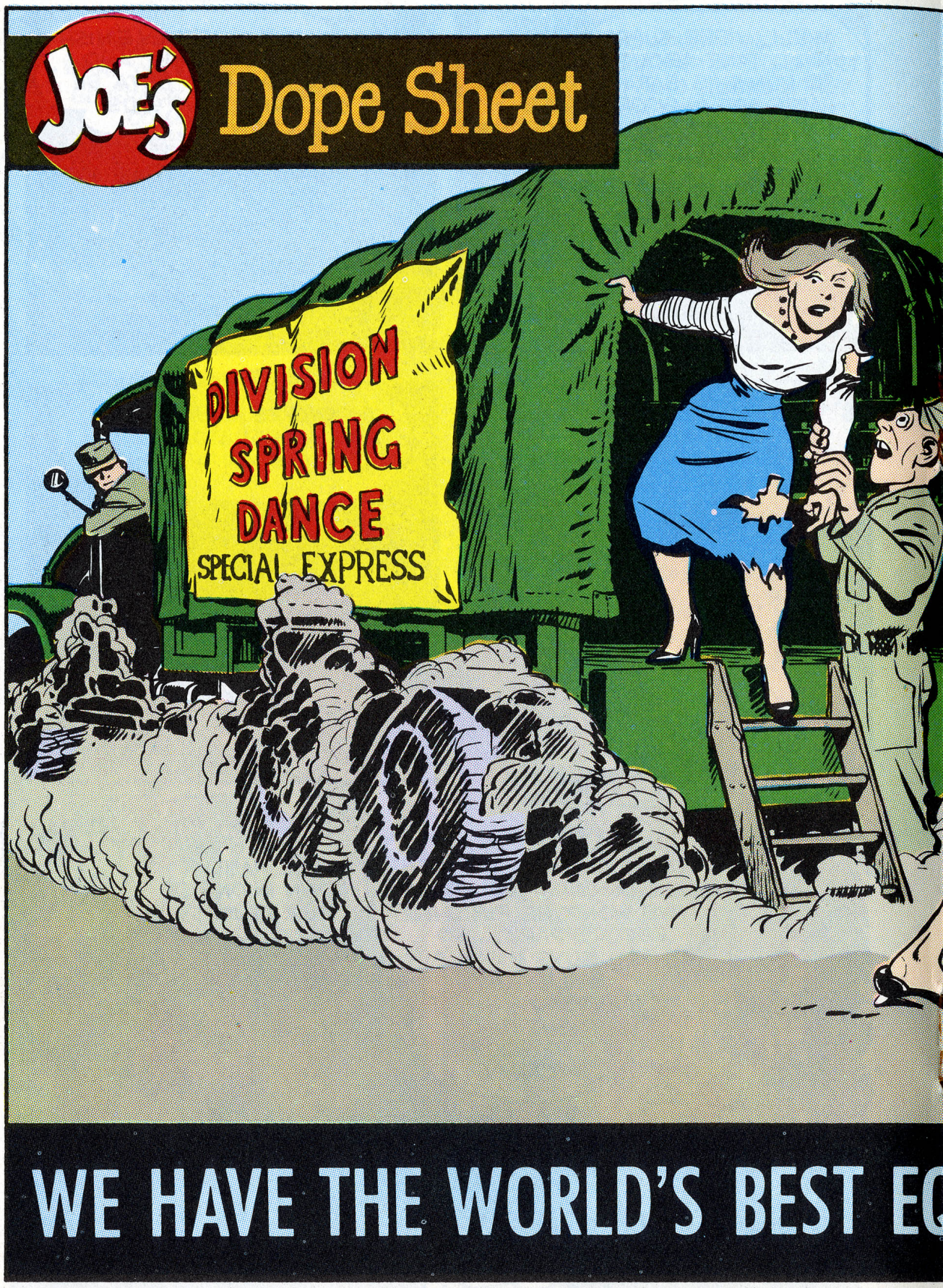
Bravo Company 2001st engineers, the outfit assigned this mission, held a CMI of its motorized equipment and turned up the need for minor 2nd echelon repair . . .

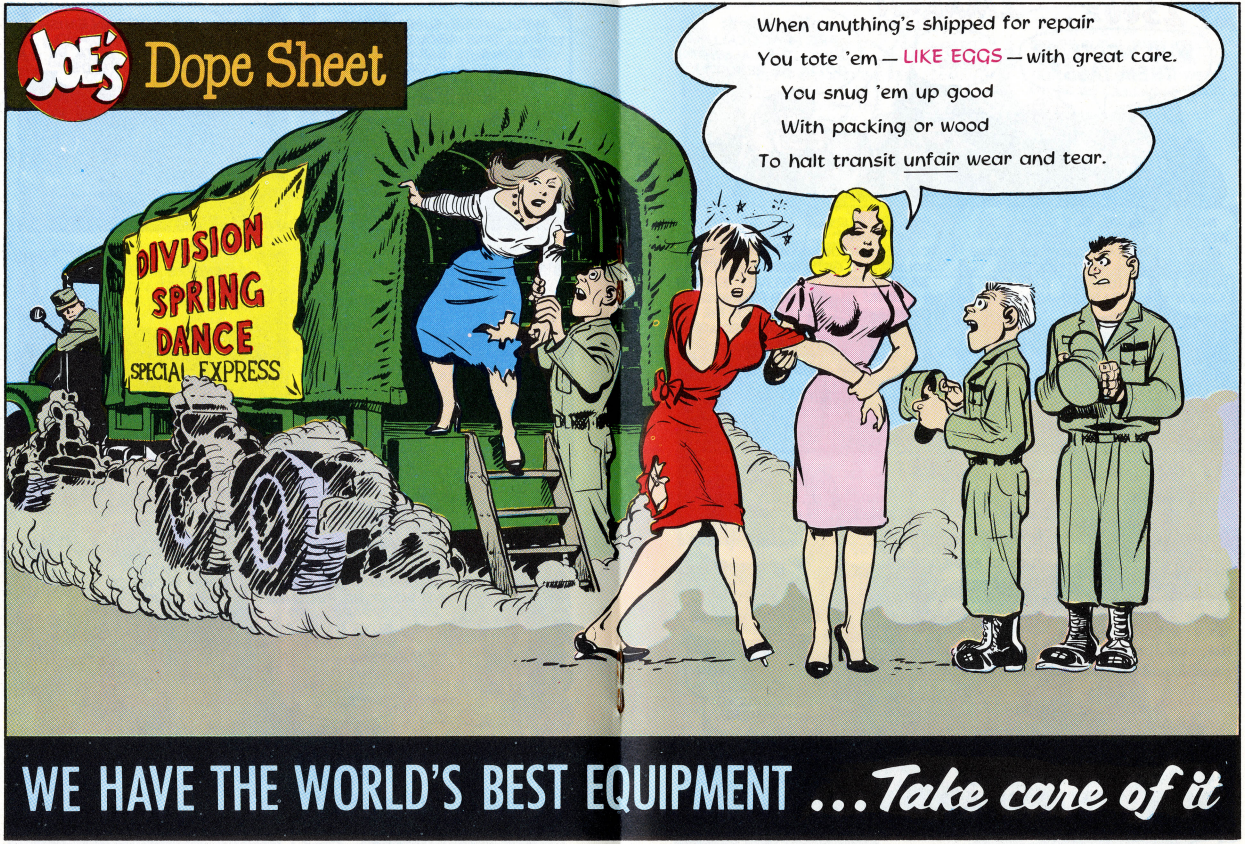
AT 1700 Z... 2 MARCH

the winds, due to a freak in the global coreolus effect, shifted. Coupled with an unprecedented change in the patterns of the high altitude wind currents . . . the barometer fell to a record low, cloud cover thickened, lightning flashed, thunder rolled . . . AND THE RAINS CAME . . .

OKAY... LET'SEE... • WHAT WE'VE GOT HERE...
1 GENERATOR WITH A WORN COMMUTATOR.
2 GENERATOR-- REGULATOR WITH BROKEN INPUT-RECEPTACLE.
3 REPAIR TERMINALS ON SLAVE RECEPTACLE.
4 REPLACE LENS ASSEMBLY IN BLACK OUT-MARKER LIGHT.
5 REPLACE TWO END COVERS ON A PAIR OF STARTERS.
THEY ALL PROPERLY TAGGED?
REET!
OKAY, GET 'EM IN THE TRUCK AND UP TO SUPPORT AT PORTO GLOBBO... THEY PROMISED TO GO RIGHT TO WORK ON 'EM... I WANT THEM BACK HERE AND ALL VEHICLES OPERATIONAL BY 0900 TOMORROW....!!
CLANK
THUD
CLATTER
BOY, WOT A BREAK! THIS IS A DREAM DETAIL!
HOW COME ?


WELL, Y'SEE, SUPPORT FIGURES IT'LL TAKE ABOUT 3 HOURS TO TO RUN THIS BATCH THRU...THESE PARTS ARE IN GOOD SHAPE EXCEPT FOR A FEW MINOR NUTS N' BOLTS...
SO, BY THE TIME THEY FINISH IT'LL BE CHOW TIME AND THE OLD MAN WHO USTA BE MY C.O. WILL INVITE US TO CHOW UP...
BY THAT TIME IT'LL BE DARK. THEY'LL NEVER HAVE THESE PARTS READY... WE'LL HA-F-TA LAYOVER IN PORTO GLOBBO!
CRASH
BANG
THORNDYKE M. BRASH, YOU ARE A OPERATOR... WOW, A NIGHT ON THE TOWN!
HMM...6...7...8... OKAY!! IT CHECKS OUT... THEY'RE ALL TAGGED... I'M AFRAID WE WON'T BE FINISHED BEFORE DARK... SO YOU GUYS MIGHT AS WELL TURN AROUND AND GET RIGHT BACK TO YOUR CAMP!!
...AND, WHEN THE STUFF'S READY WE'LL HAUL IT DOWN IN ONE OF OUR TRUCKS!
FOXED AGAIN!


JOE'S
Dope Sheet
DIVISION
SPRING
DANCE
SPECIAL EXPRESS
WE HAVE THE WORLD'S BEST EQ
IF YOU WANT TO DISPLAY THIS CENTERPIECE ON YOUR BU



IF YOU WANT TO DISPLAY THIS CENTERPIECE ON YOUR BULLETIN BOARD, OPEN STAPLES, LIFT IT OUT AND PIN IT UP.

QUIPMENT ... *Take care of it*

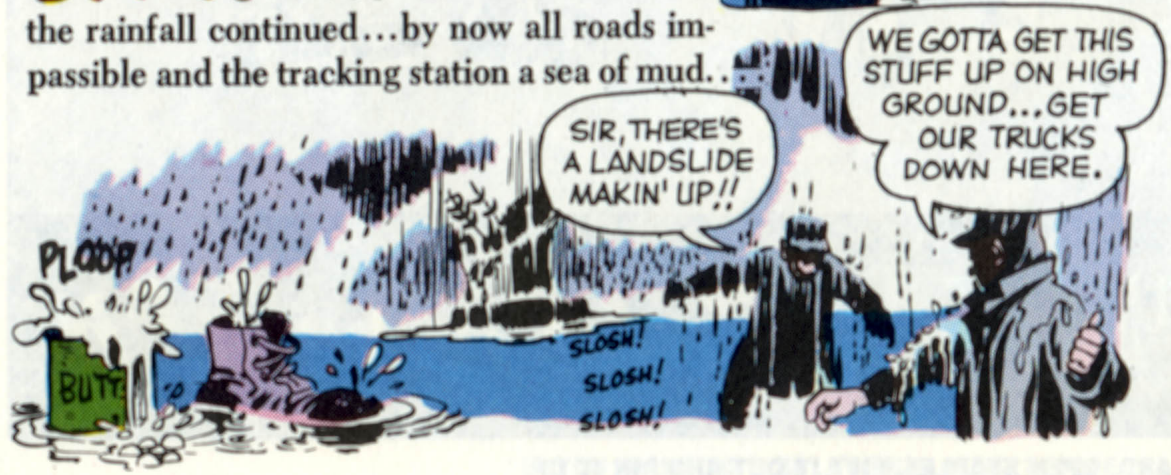
LLETIN BOARD, OPEN STAPLES, LIFT IT OUT AND PIN IT UP.

AT 0830Z...3MARCH

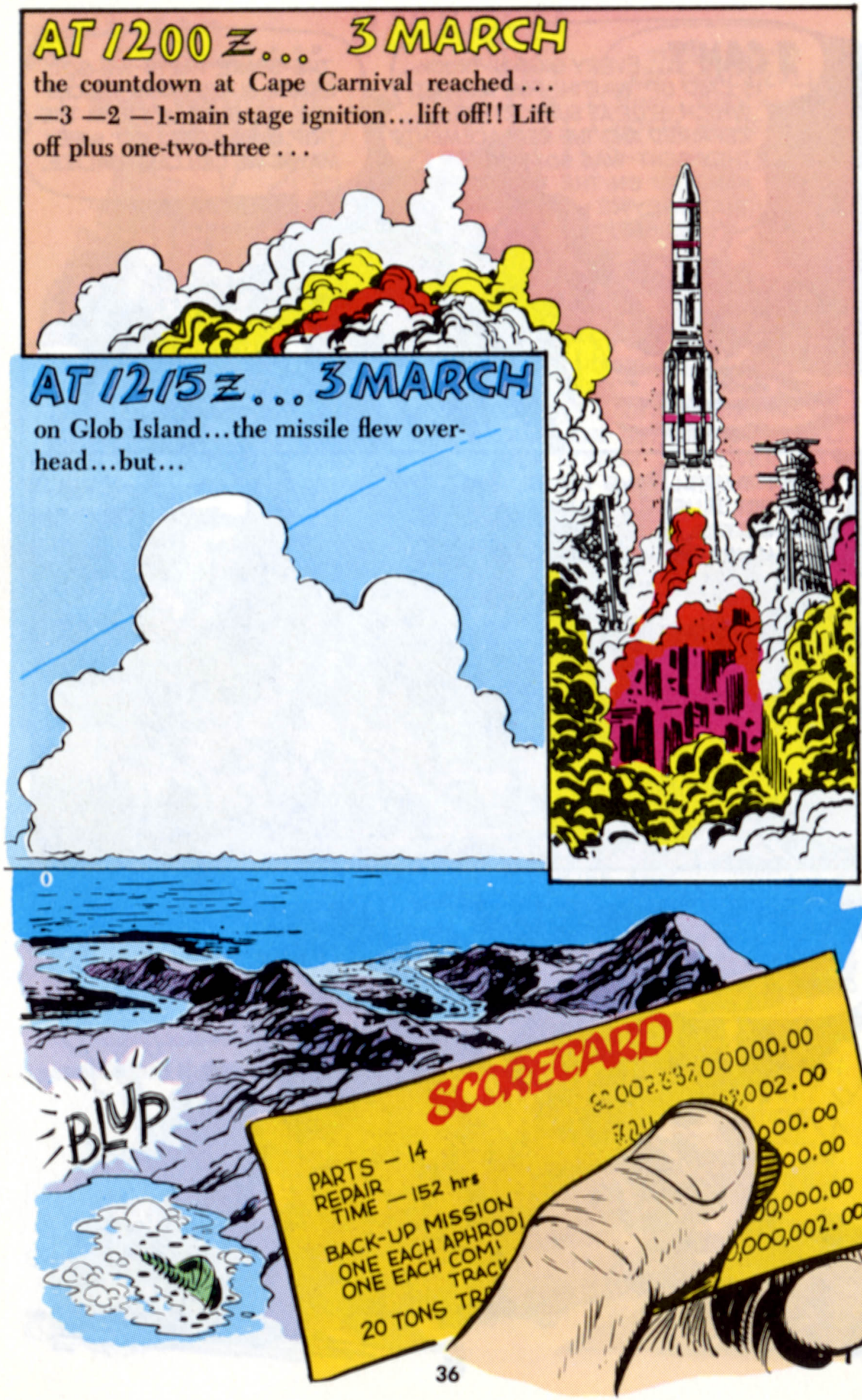
the support unit's trucks take the repair parts back....

BY 1000Z... 3MARCH

the rainfall continued...by now all roads impassible and the tracking station a sea of mud..



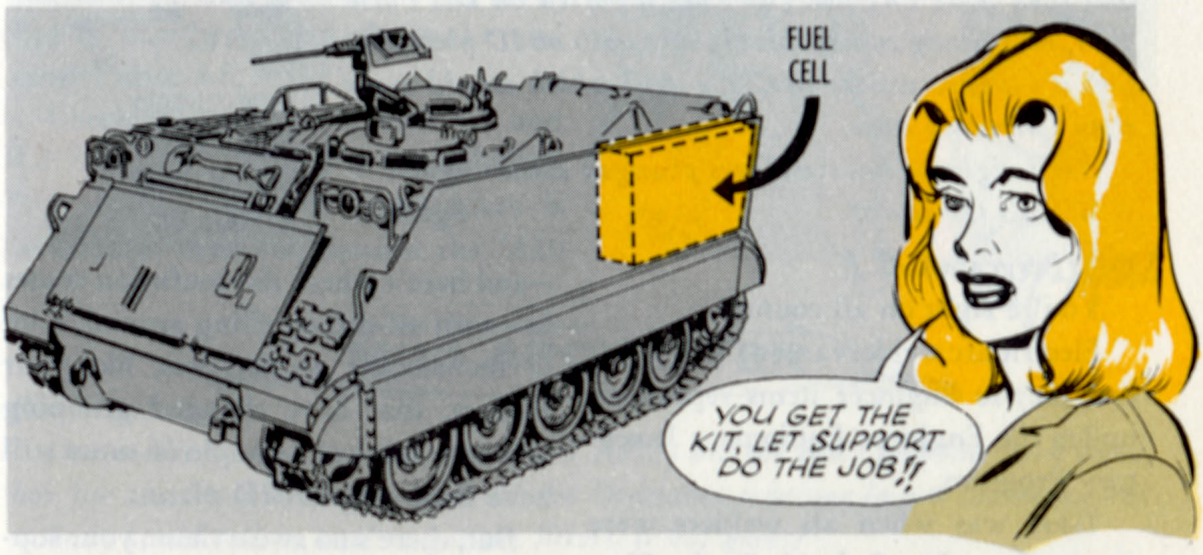
I CAN'T... EVERY GIGGIN' TRUCK IS LAID UP WAITIN' FOR A PART WHICH IS UP AT SUPPORT BEIN' REPAIRED AND THE REPLACEMENTS THEY SENT WAS SO POORLY HANDLED ON THE WAY DOWN THAT THEY'RE USELESS!
RUMBLE RUMBLE
THE SPARE PARTS WE GOT STORED IN THE PARTS TRUCKS ARE ALL BEAT UP FROM THE TRIP OVER HERE LAST WEEK. MAYBE WE CAN CANNIBALIZE.
BEST THAT'LL GIVE US IS ABOUT 3 USEFUL TRUCKS AND IT'LL TAKE A FEW HOURS TO MAKE THE SWITCH...
RUMBLE
THERE'S NO TIME FOR EVEN THAT NOW! RUN!!
GOOD GRIEF, THE RAIN WASHED OUT THE HILLSIDE!
THE SLIDE BURIED THE WHOLE SET UP IN A BIG GLOB OF MUCK!


AT 1200 Z... 3 MARCH
the countdown at Cape Carnival reached... —3 —2 —1-main stage ignition...lift off!! Lift off plus one-two-three...
AT 1215 Z... 3 MARCH
on Glob Island...the missile flew overhead...but...
BLUP
SCORECARD
PARTS — 14
REPAIR TIME — 152 hrs
BACK-UP MISSION
ONE EACH APHRODI
ONE EACH COMI
TRACK
20 TONS TR

CURE FOR M113 LEAKS

Dear Half-Mast,

How do you patch holes in the rubber fuel cell of a M113? We got two that leak but there don't seem to be any patching kit listed in the supply system?



Dear Sergeant J. Y.,

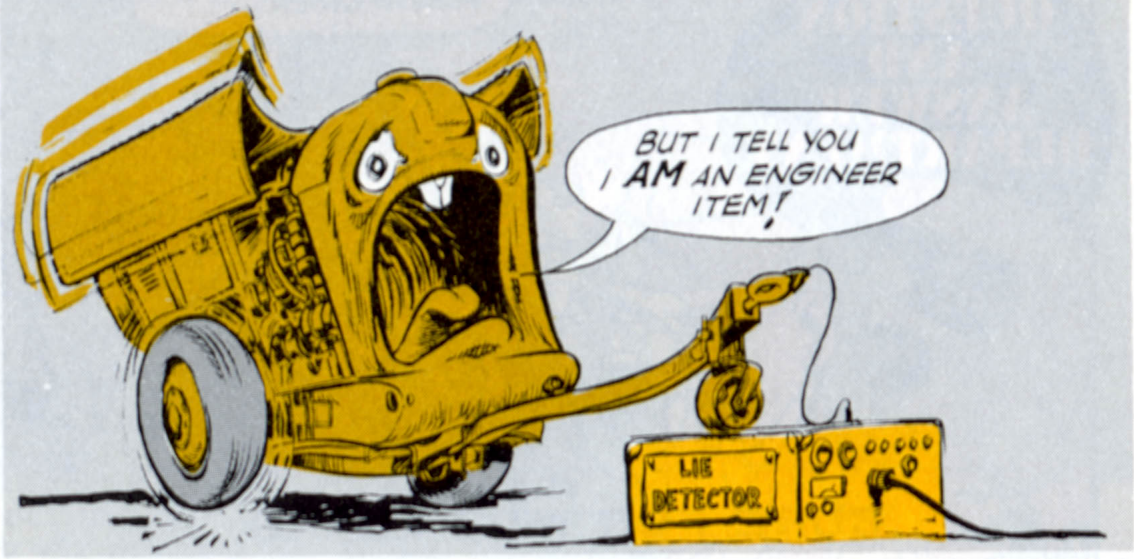
You got it made in the shade on this repair, Sarge. All you gotta do is tell your troubles to your support unit—don't bother the chaplain.

Support will order out some repair materials like it explains in Chapter 6, Section II of TM 9-2300-224-35 (15 Aug 60). These kits are special order items because they have to be absolutely fresh for best results.

When the kits come, turn your vehicles over to your support unit and they'll do the work. It's as easy as falling off a greasy log.

Half-Mast

A CLASS BY THEMSELVES



Dear Sgt Dozer,

I thought electric arc welders were assigned FSC 3431, that they were Engineer, and get reported on DA Form 5-73. But, along comes this Hobart with an ID plate that says it's an arc welder in Class 3432 which would make it an Ordnance item.

Am I right or have welders changed classes again? What's the story? *Sgt L. C.*

Dear Sergeant L. C.,

You're right on all counts.

Electric arc welders are in Class 3431, and they're Engineer items reportable under the Engineer Equipment Inventory Program.

Time was when all welders were grouped under Federal Stock Class 3432 and were the responsibility of the Corps of Engineers. Then, a couple of years back, they were switched to Ordnance and broken down into three groups: FSC 3431, Electric Arc Welders; FSC 3432, Electric Resistance Welders; and FSC 3432, Gas Welders.

Not too long ago, electric arc welders (FSC 3431) once more became the responsibility of the Engineers. However—and here's where the confusion comes in—with all this shuffling around, a lot of the electric arc welders, like your Hobart, that have changed grouping and tech services a couple of times still have their original ID plates.

But, there's no sweat there, your support people can handle the ID plate problem by putting the right one on your welder.

Incidentally, Change 1 to AR 711-541 (21 Dec 60) clues you to the FSC 3431 welders that're to be reported on DA Form 5-73. It lists the manufacturer, model number, and FSN.

Sgt Dozer

TRY AN M20

Dear Half-Mast,

Could you please give me some information on what to use to refill our M15 breathing apparatus? Our Explosive Ordnance Detachments have these items and it is a constant problem refilling the cylinders.

SP 6 J. H. B.

Dear Specialist J. H. B.,

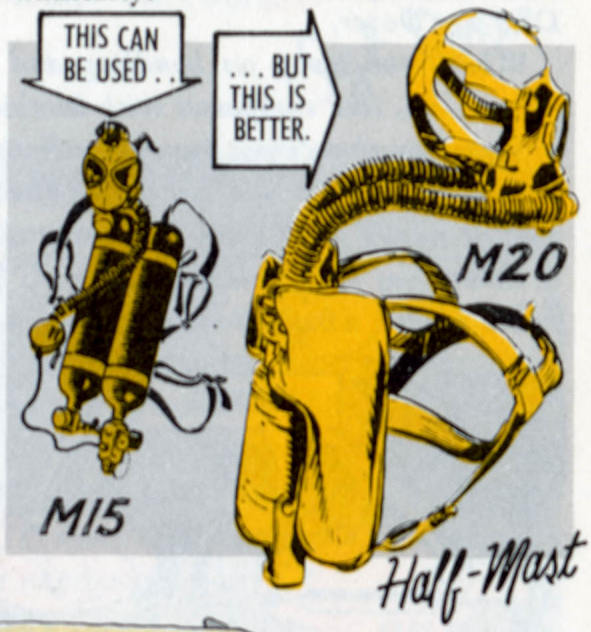
There may be an easier solution to your problem than refilling the M15's.

The M20 oxygen generating breathing apparatus (FSN 4240-678-5263) has a canister type mask. It was adopted only for EOD use and it's available from the Chemical Corps.

If you have one of these compressors around your area, Rix Model XM 366 or Joy Models 15H1 or 15HGP5-MS-1, you can use it to recharge your M15. But be sure you check the **make** and **model number,** both!!!

Check TM 3-310-15, with C1 and C2, for info on recharging the cylinders.

If neither of these compressors is available, then requisition the M20 and turn in the M15 after you get the M20. TA 20-11, 5 May 61. (Line Item 104201) is your requisitioning authority.

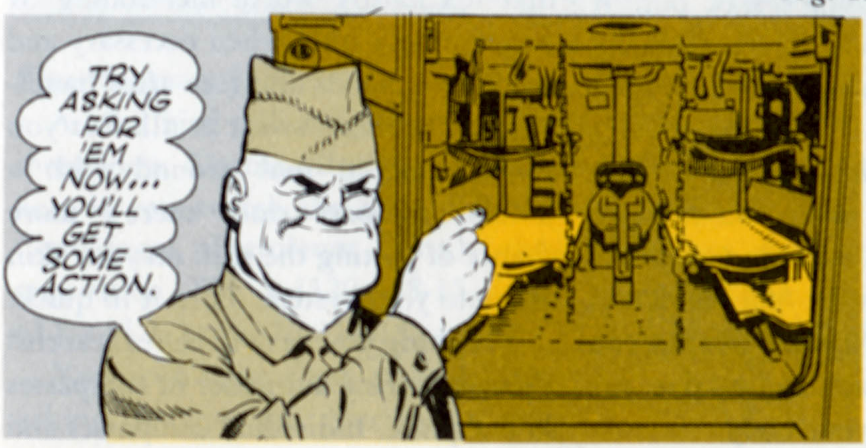


M113 APC LITTER

Dear Half-Mast,

Our medic section has the new M113 APC's but we can't find the stock number for the litter kits. We tried all the Ordnance echelons in our command but nobody could tell us how to get the litters. What gives?

SSgt R. P.



Dear Sergeant R. P.,

The Kit, Litter, is ordered under FSN 2590-771-9113 (Ord number 10866194). Word has just gone out as to the FSN and availability date. Try again.

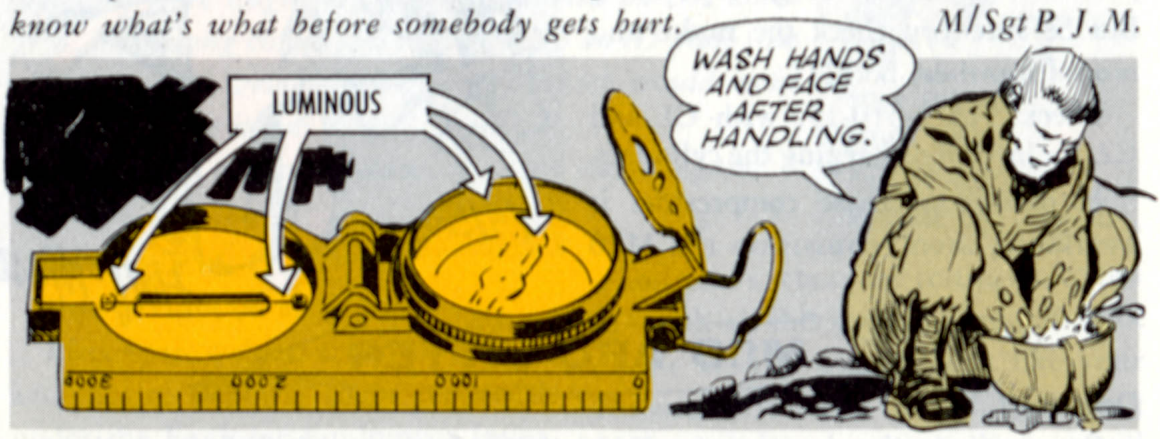
Half-Mast

Dear Sgt Dozer,

What's the scoop on handling and storing equipment that has radium in its makeup, like compasses with luminous dials?

Some say there's not enough radium on those dials to do any harm no matter how much contact you have with the equipment. Others say you can't be too careful where there's any radium at all.

Compasses with radium dials are a big item in this TOE outfit. We need to know what's what before somebody gets hurt. *M/Sgt P. J. M.*



Dear Sergeant P. J. M.,

There's always some danger where you have radium, Sarge, even in small amounts. Radium won't stay put. It tends to break down, like a chalking paint, creating a radioactive gas (RADON).

So beside watching out for radium contact with your skin, you want to make sure you don't inhale any of the gas. It's no trick to wash your hands and face after handling a compass, but you can't very well reach radioactive gas after it gets inside your body.

Now the amount of radioactive gas that comes from one compass is so small that it's hardly worth mentioning. If you handle it only when necessary and wash your hands and face after handling it, there's no sweat at all. But you don't want to fool around with a broken compass since there's more chance of getting the stuff on your skin and into your system. Turn it in quick.

The thing you have to be real careful about is storing a number of compasses in one place. Individual compasses and

those in sets and kits can be stored anywhere. But when you have five or more, they have to be stored in a special place where there's good ventilation. TB Eng 61 (31 Aug 59) gives you some dope on this.

It takes about six times as much fresh air to ventilate your supply of compasses as it does to keep the same space breathable for man or beast.

So you either store your compasses under separate cover outside the supply room, or you air out their part of the room at least once a day. And you treat 'em to another 10 minutes of extra airing before handling the stock.

Here's one more bee for your barracks buddies.

Nobody—but nobody—should disassemble, repair, or replace parts on compasses and such equipment with luminous dials.

Turn 'em in pronto for replacement, if they won't work.

Sgt Dozer

Dear Sgt Dozer,

We've been playing a string of Gorman-Rupp pumps (Model 04A12-MVG4D) by ear, because we can't find the score on DA pubs for this equipment.

The ID plate calls them QM Pump, Self-Priming, Centrifugal, Fuel Dispensing, and gives us FSN 4320-691-1071. But all that gets no action when we put in for pubs. What's wrong with our approach?

SFC J. N.
QM POL Co.

Dear Sergeant J. N.,

A kiwi bird tells me you could play those new Gorman-Rupp pumps by note if you switch the title to Pump, Centrifugal, Petroleum (Eng), then requisition TM 5-4320-218-15 (Mar 61) and LO 5-4320-218-15.

You won't get these pubs without asking, because the distribution page doesn't list QM TOE's.

You also want to ask for new ID plates on these pumps, to clear up the record. Ask your field maintenance people to replace the old QM plates with new Engineer plates next time the pumps go to the shop.

Sgt Dozer

TRAILER TROUBLES

Dear Half-Mast,

We got problems on the proper length air hoses and inter-vehicular cables on our 1½-ton trailers. As you know, some take one length and other 1½-tonners take a different length.

Could you give us the right length and the correct FSN of both the air hoses and the cables for the different types of 1½-ton trailers.

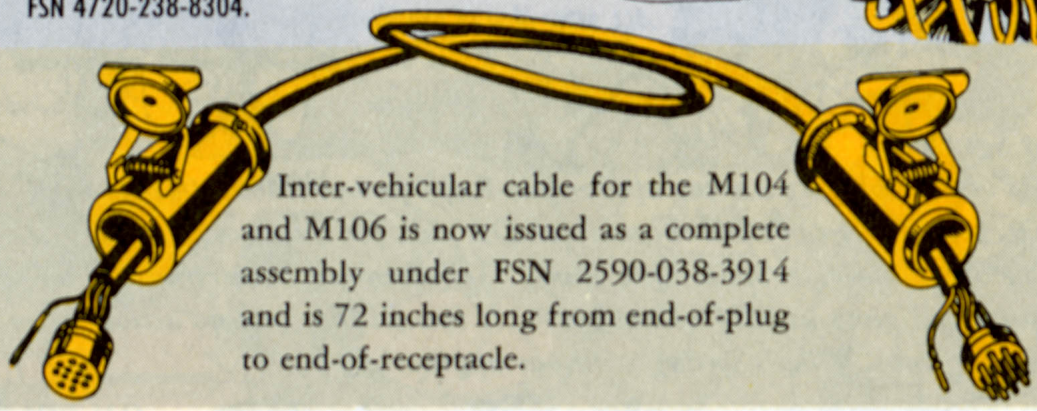
SP5 G. C.

Dear Specialist G. C.,

First—here is the break-down for the M104 and M106 1½-ton trailers:

Two air hoses are needed, one for service brakes and one for emergency brakes.

Each air hose consists of:
Two couplings, FSN 4730-595-0083.
Two adapter assemblies, FSN 4730-278-4321.
70 inches of hose cut from bulk hose, FSN 4720-238-8304.

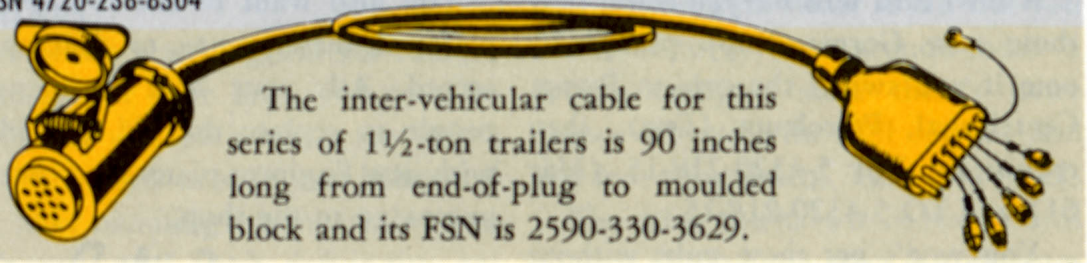


Inter-vehicular cable for the M104 and M106 is now issued as a complete assembly under FSN 2590-038-3914 and is 72 inches long from end-of-plug to end-of-receptacle.

Now for the M102A1, M103A1, M103A3, M103A4, M104A1, M105A1, M105A2, M107A1, and M107A2 1½-ton trailers.

You need one air hose instead of two.

The air hose is made from:
Coupling, FSN 4730-595-0083
Adapter, FSN 4730-278-4321
Connector, FSN 4730-278-8257
Connector, FSN 4730-287-3163
81¾ inches of hose from bulk hose stock, FSN 4720-238-8304



The inter-vehicular cable for this series of 1½-ton trailers is 90 inches long from end-of-plug to moulded block and its FSN is 2590-330-3629.

Half-Mast

FREE! 90 DAYS ONLY!

Within 90 days of receipt—that's the time to find defective parts on a piece of Engineer equipment.

After that you hold the bag on bad parts even if they're obviously defective in material, design, or workmanship. Of course, after the 90 days the whole unit is still covered by AR 700-38.

So you want to peel an eye for defective parts when a new piece of Engineer equipment checks into your outfit.

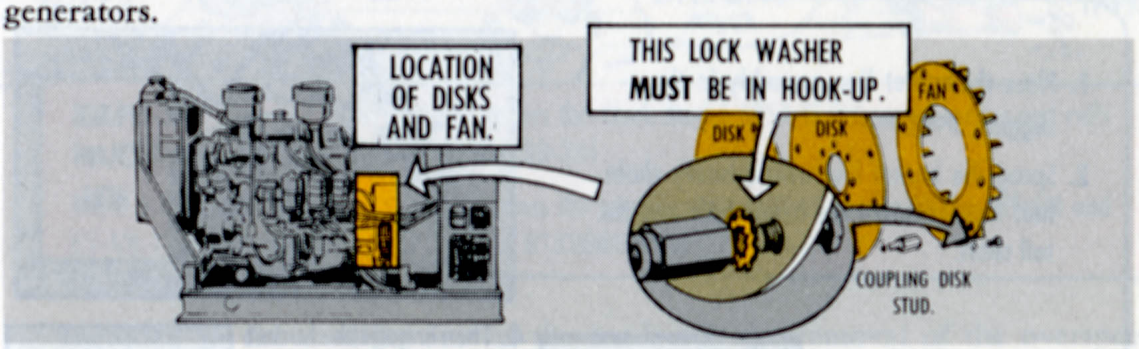
Best way to find bad parts is to operate the equipment.

Then, if you catch a part failing because of any defect in its material, design, or workmanship—quick, like a mink, turn the part back to your supply source.

From there on, the procedure's spelled out in DA Cir 750-2 (13 Jul 61), including how you collect your free replacement for the defective part. Info on the UER, DA Form 468, is included in AR 700-38.

ADD A WASHER

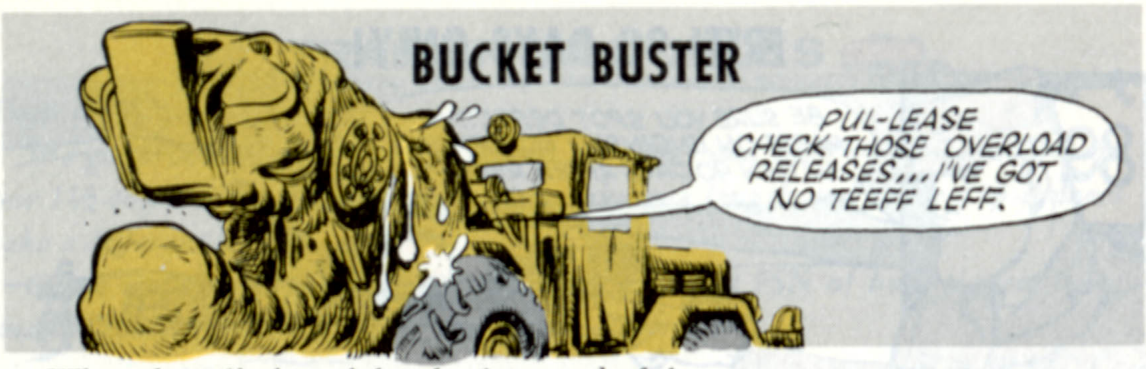
Sometimes it's the little things that foul up the works. Like the failure of the coupling disk studs in your Hol-Gar Model CE-600-AC/EG 60 KW generators.



If the lock washers are left off the disk studs, the studs loosen from backlash during operation . . . and crack . . . or shear off. This leaves the coupling disk and fan wide open for damage.

You can short-stop trouble by giving your Hol-Gar the eagle-eye to see if the lock washers have been installed on the coupling disk studs. If the washers are missing, have them installed pronto.

You'll need Lockwasher, FSN 5310-010-3321 (Ord), available through your regular supply channels.



When they slip just right, they're wonderful.

But when they won't slip, they can sideline your Unit Rig Model 4262 trencher quicker than you can holler "WHOA!"

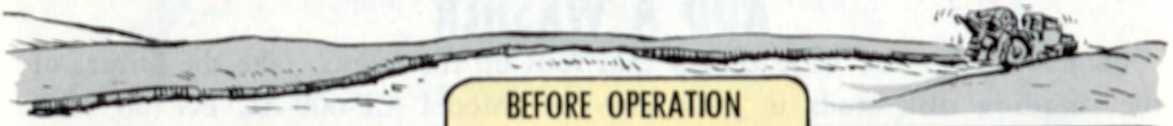
"They" in this case are the overload releases—or clutches—on the sprocket of the Unit Rig's bucket drive.

It's "their" job to let the sprocket slip, and stall the engine, any time the bucket line hooks into a big rock, pipe, or other deadhead snag in the trench.

Trouble is, those releases can't tell you how they feel about doing their job. They won't squeal if you adjust 'em too tight. And it's mox nix to them if you let them crumb up with rust and dirt.

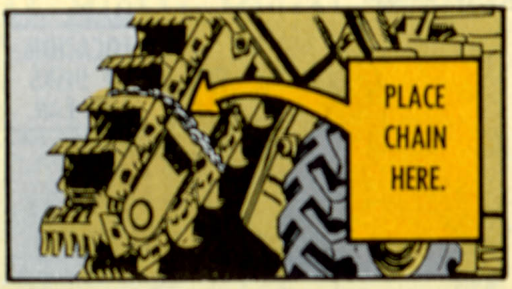
They just won't work—and neither will your trenching rig—after a snag busts up the bucket drive.

So if you don't want to get caught with your bucket drive down and no place to hide it, here's what you do—

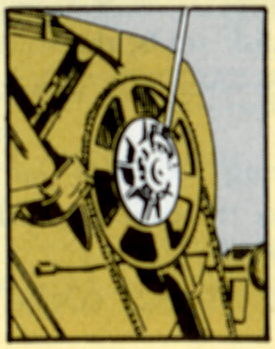


BEFORE OPERATION

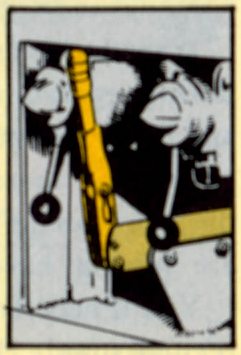
1. Place the bucket line assembly in the digging position.
2. Sprag the bucket line with a heavy chain, half way between the head shaft and the tail shaft.



3. Back the adjusting nut on both overload releases out to a point flush with the end of the shaft, to be sure spring tension is not overtight.



4. Then engage the bucket line drive. With the engine at full governed speed, and the transmission in top (5th) gear, both overload releases should slip with just enough drag to rapidly stall the engine.

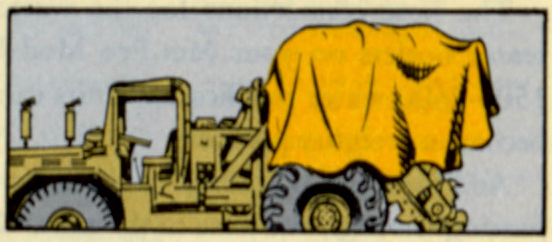


5. If the overload releases slip too freely, with not enough drag to stall the engine, disengage the bucket line drive. Then take up the adjusting nuts until you load the right amount of spring tension on both sprockets. Never operate the trencher with one clutch slipping more than the other clutch.

6. After you finish setting the tension adjustment, make sure that both locking set screws are firmly tightened.

AFTER OPERATION

A section of tarp, lashed over the boom head and sprockets when your Unit Rig trencher is not operating, will help keep rust and dirt from gumming up the works.



Any time you can't get both overload releases to operate right, don't risk sidelining the trencher. Holler for help.

If your own mechanics don't have the tools to clear up the trouble, pass the word to your support shop. After they hone out whatever is bugging the operation, they'll probably graphite the working surfaces for longer-lasting OK operation.

GET THESE MWO's

Outfits with the scoop-type hydraulic front loaders will want to latch onto a copy of a couple of MWO's that're URGENT deals.

MWO 5-3805-200-35/1 (23 Jun 61) covers the Clark Model 175A-M 2½ cu yd loader and calls for MWO kit EMC No. 81336MWO53805200-351.

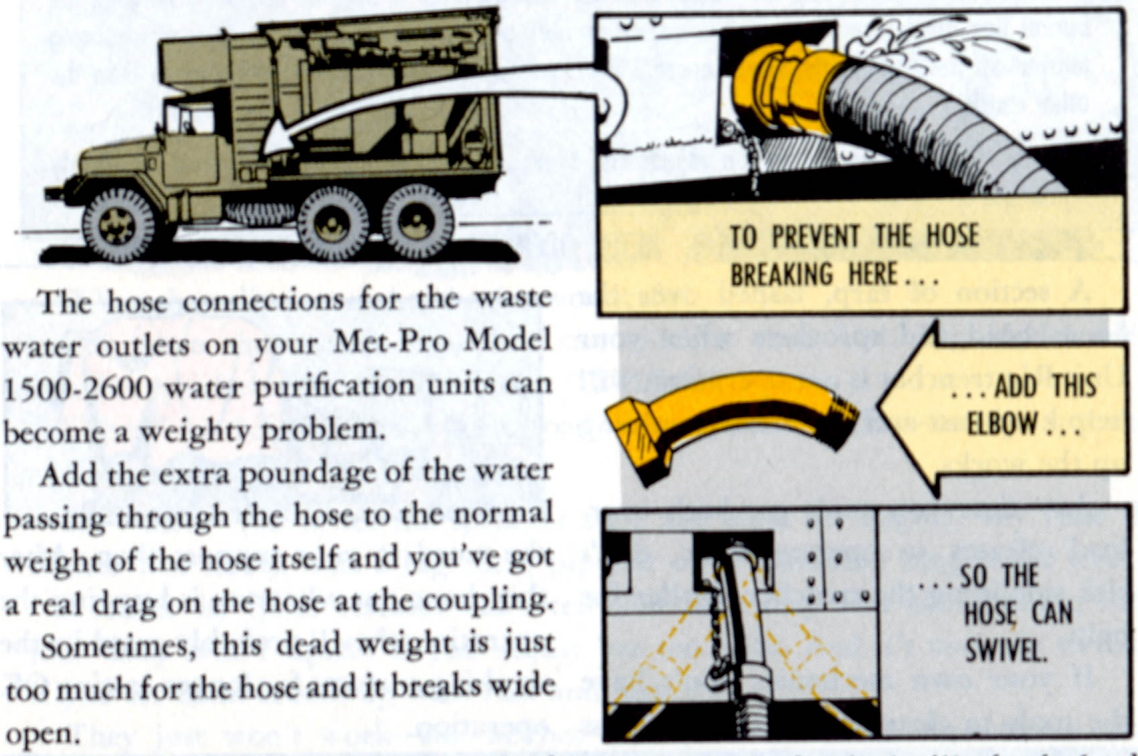
MWO 5-3805-207-35/1 (19 Jun 61) covers the modification of Clark loader Models 85-AM and 85-AM-23. You'll need MWO kit EMC No. 81336MWO53805207-351.

Included in the modification of the loaders is the removal of the overspeed governor, low oil pressure and high coolant temperature safety devices, and the installation of caution plates. In addition, on the Clark Model 175A-M, tie rod trouble will be eliminated by the installation of a retainer, protector felt, and self-locking nut.

You requisition the MWO kits from the Engineer Maintenance Center, P.O. Box 119, Columbus 16, Ohio, through regular supply channels.

Be sure to include the make, model and serial number of your rig and the MWO kit number on your requisition.

ADD A SWIVEL



The hose connections for the waste water outlets on your Met-Pro Model 1500-2600 water purification units can become a weighty problem.

Add the extra poundage of the water passing through the hose to the normal weight of the hose itself and you've got a real drag on the hose at the coupling.

Sometimes, this dead weight is just too much for the hose and it breaks wide open.

No use sounding off over spilled water. You can keep the hose from breaking by adding a 2-in brass pipe with a ⅛-in bend and the addition of fittings from a salvaged hose. Then, you weld the fittings to a swivel so the hose'll lay in any direction.

The pipe and swivel will take the load off the hose and give you a spill-proof operation since the pressure of the combined weight of the hose and swivel is divided evenly around the hose. You can get the elbows through local purchase.

A VELVET TOUCH

Take it nice and easy when you put your size 12's on the brake treadle of your Walters Model MF fire truck . . . unless, of course, MWO 5-4210-202-35/1 (Sep 61) has already been applied.

It only takes a light touch to put the air brake system into quick and positive action. Stomping on the treadle like a grape crusher won't make the truck stop any quicker—it'll just make the brakes grab and lock.

So, gently, friend, take it gently when you want to bring the Walters to a stop. A heavy foot could make it a more permanent stop than you bargained for.

A selected list of recent publications of interest to Organizational Maintenance Personnel. This is a list compiled from recent Adjutant General's Distribution Center Bulletins.

TECHNICAL MANUALS

TM 5-700 Oct Fld Water Supply.

TM 5-2010-200-10, -20 Nov Propelling Unit, Marine Outboard; Diesel 165 HP Murray & Tregurtha Harbormaster Mod OA6 (TC).

TM 5-3655-204-20 Nov Gen Plant, Oxygen-Nitrogen, Air Prod Mod LON-5.

TM 5-3740-200-15 Nov Sprayer, Insecticide, Skid Mtd; Gas 40 GPH FOG.

TM 5-3805-219-15 Sep Loader, Scoop Hough Mod H-90M, Non-Winterized.

TM 5-3810-226-12P Oct Crane, Crawler Mtd, 65 Ton; Manitowoc Mod 3900.

TM 5-3820-214-15 Oct Breaker, Paving, Pneumatic, Le Roi.

TM 5-3825-219-20 Sep Snowplow, Trk Mtd; Hydraulically Controlled; Frink Mod RO-10 Wausau Mod M1123.

TM 5-3950-200-20P Oct Winch, Drum, Power Operated; Skagit Mod B-45-B, Type 2 MG-SG.

TM 5-4310-216-25P Oct Compressor, Recip, 5 CFM; 175 PSI.

TM 5-4310-240-25P Oct Compressor, Recip Air Harris Mod 53-121B.

TM 5-4320-214-12 Nov Pump, Cent Chain Belt Mod 6LWG.

TM 5-4320-219-12 Nov Gasoline.

TM 5-6115-297-15 Nov Gen Set, 2 KW, DC, 12V; Leland Ohio Mod LOE-660.

TM 5-6115-297-25P Oct Gen, Gasoline; 2 KW, DC, 12V, Skid Mtd, Leland Ohio Elect Mod LOE-660.

TM 5-6115-302-20 Sep Gen Set, Diesel 45KW Harnischfeger Mod 400A.

TM 5-6115-233-10 Oct Gen Diesel; 30 KW, Kurz & Root Mod CIEO-1.

TM 5-6675-207-15 Oct Surveying Instr, Autonetics Mod ABLE C2A.

TM 9-2300-224-10 Nov. APC M113.

TM 9-2330-257-24P Nov Semitrailer, Van: Elect XM555, XM556, XM557 & XM558.

TM 10-3530-201-20P, C2, Nov Trailer-Mtd Clothing Repair Shop.

TM 10-3930-204-20P, C3, Nov 6000-Lb Towmotor Forklift.

TM 10-3930-215-20P Nov Trk, Lift Fork Gas, 6,000 Lbs MHE 171.

TM 10-3930-407-20P, C1, Nov 4000-Lb Warehouse Tractor (MHE 172).

TM 11-5805-201-20P Oct TA-312/PT.

TM 11-5805-218-20P Nov Multiplexer MX-1442/TC.

TM 11-5805-257-12P Oct Generators Ringing-Hand G-42/PT.

TM 11-5805-263-12P Sep Terminal Telephone, AN/FTA-6.

TM 11-5805-274-20P Oct Amplifier Audio Freq AM-911/FG; Multiplexer TD-97/FGT-2 and Demultiplexer TD-98/FGR-3.

TM 11-5815-206-20P Nov Teletypewriter Set AN/FGC-1.

TM 11-5815-254-20P Oct Indicator ID-176/GX.

TM 11-5815-274-20P Oct Dual Diversity Converters CV-31/TRA-7, CV-31A/TRA-7, CV-31B/TRA-7, CV-31C/TRA-7, and CV-31D/TRA-7.

TM 11-5820-265-20P Nov Transmitter Radio T-416/GR.

TM 11-5815-278-12P Oct Paper Reel RL-136/U.

TM 11-5820-277-20P Oct Teletypewriter Repeater AN/FGC-7A.

TM 11-5820-287-20P Nov Radio Set AN/TRC-24.

TM 11-5820-347-20P Oct Radio Sets AN/FRC-7A and AN/FRC-17A.

TM 11-5820-348-20P Dec Antenna RC-292.

TM 11-5820-358-20P Oct. Receiver, Radio R-390A/URR.

TM 11-5820-362-20P Nov Radio Set AN/GRC-41.

TM 11-5825-211-12P Oct Beacon Set, Radio AN/GRN-11.

TM 11-5835-205-20P Oct Recorder-Reproducer Set, Sound AN/TNH-2.

TM 11-5835-207-20P Oct Recorder-Reproducer RD-31B/U.

TM 11-5835-217-20P Oct Recorder-Reproducer Sets, Sound AN/TNH-2A and AN/TNH-2B.

TM 11-5835-218-20 Oct Recorder-Reproducer Subassembly, Sound RD-132A/TNH-2.

TM 11-5840-211-20P Nov Radar Set AN/PPS-4.

TM 11-5840-257-10 Oct Video Mapping Gp; Gp AN/GPA-30.

TM 11-5895-213-20P Nov Sound Ranging Set GR-8.

TM 1-5895-230-12P Oct Countermeasures Set AN/MLQ-8.

TM 11-5965-209-15P Oct Headset H-32/U.

TM 11-5965-211-15P Oct Chest Set H-12/GT, H-18/GT.

TM 11-5965-212-15P Nov Microphones M-52/U and M-52A/U.

TM 11-5965-224-15P Oct Handsets H-60/PT and H-165/U.

TM 11-5965-242-20P Oct Headset-Chest set H-164/U.

TM 11-5965-254-15P Sep Chest Set, Electrical H-28/GR.

TM 11-6625-217-20P Nov Test Set TS-762/TC.

TM 11-6625-237-20P Nov Gen Pulse AN/PPM-1 and AN/PPN-1A.

TM 11-6625-282-20P Radio Freq Wattmeters AN/URM-43A and AN/URM-43B and Wattmeters AN/URM-43C and AN/URM-43D.

TM 11-6625-391-12 Nov T/S, Radio AN/ARM-52.

TM 11-6625-404-12 Nov Test Set, Electron Tube TV-13A/U.

TM 11-6625-433-20P Nov Wattmeter AN/URM-98.

TM 11-6625-437-10 Dec Wiring Test Set TS-563A/FT.

TM 11-6660-209-20P Nov Wind Measuring Sets AN/GMQ-12 and AN/GMQ-12A.

TM 11-6665-200-12 Oct Radiacmeters IM-108/PD and IM-108A/PD.

TM 11-6730-205-20P Oct Projector Set AP-4(1).

TM 11-7440-201-12 Dec Off-Line Cont Unit for Computer Set, Digital Data Gen Pur AN/MYK-1(V).

TM 11-7450-201-20P Oct Recorder-Reproducer Set, Sound AN/TNH-3.

TM 55-1925-201-12 Oct Tug, Harbor, Diesel, Steel, 45 Ft Design 320.

TM 55-2210-216-20 Sep Loco, Dsl-Elect, 56½, 60, 63, and 66 Inch Gages, 120 Ton Loco Eng Mod 244-F, Gen Elect Mod GE-198238G1 and GE-198238G2.

LUBRICATION ORDERS

LO 5-3805-225-15-1 Sep Loader, Scoop Type; ¾ Cu Yd Clark Mod 55A-M.

LO 5-3805-225-15-2 Sep Loader, Scoop Type: Clark Mod 55A-M.

LO 5-3810-207-20-2, -3, -4 Nov Crane-Shovel Quickway Mod M200 Carrier Mod SS-6749.

LO 5-3820-214-15 Oct Breaker, Paving, Pneu, LeRoi.

LO 5-3825-213-20-1, -2, -3 Oct Snow Removal Unit, SP, FWD Mod S-349-V W/ Two Engines Waukesha Mod TH884.

LO 5-3895-218-15-1, -2, -3 Oct Paving Machine, Bit Mat; Barber-Greene Mod 879-B.

LO 9-1005-224-10 Aug Mach Gun M60.

LO 9-2300-224-10 Nov APC M113.

MODIFICATION WORK ORDERS

MWO 9-2320-209-20/4 Nov Truck, Van, 2½ Ton, M512 Shortening of Fuel Line.

MWO 9-2320-218-20/3 Dec Trk, Utility: M151: Drain Holes in Mirror Arm.

MWO 9-2320-218-20/5 Nov Trk Utility: M151: Repl of Whl Spindles.

MWO 9-2350-215-20/7 Dec Tank, M60 Inst Jumper In Starter Cir.

MWO 9-4910-407-10/1 Dec Pneumatic Tire Demounter Bead Breaking Shoes.

MISCELLANEOUS

AR 700-16 Jan Calib Services.

AR 750-712 Dec Mod of A/C & TC Air Items.

DA Form 9-38 Oct Corporal II Arty Firing Area Oper Proc Sheets.

DA Pam 310-22 Nov Index of TC SM's.

SB 11-527 Nov Conversion of Tool Equip TE-41 to Tool Kit TK-115 ( )/U.

SB 55-34 Nov TC Critical Items.

SM 3-4-1040-A42 Nov Portable Flame Thrower—Irritant Gas Dispenser, M27.

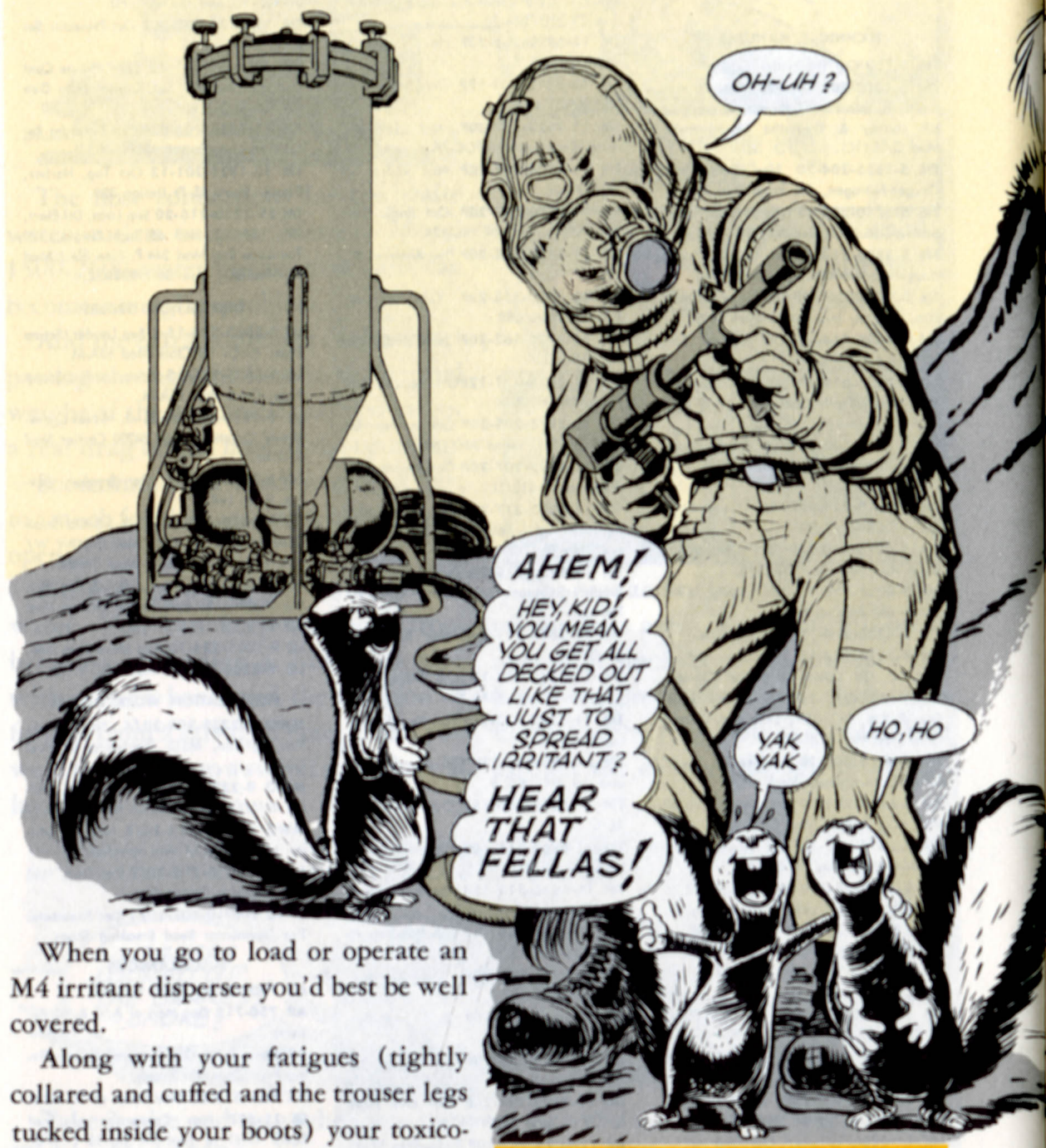
TB 5-505-1 Nov Proc for Licensnig Operators of Eng Equip.

TB 9-1300-203/2 Nov Cart, 105-MM, Description and Use.

TB 9-1300-204/1 Nov Cart, 90-MM, Rifle M67.

TB 9-2320-206-10/1 Nov Trk Tractor: 10-Ton, M123, etc.

TAKE COVER



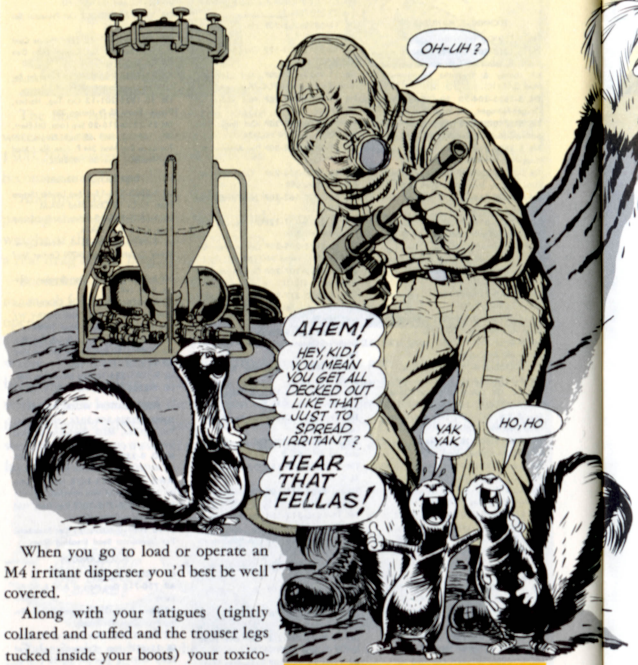
When you go to load or operate an M4 irritant disperser you'd best be well covered.

Along with your fatigues (tightly collared and cuffed and the trouser legs tucked inside your boots) your toxicological agent rubber gloves, and your M9A1 field mask, you also need an M3 hood to shield any bare spots behind your face.

The gloves are QM items, and here are the FSN's for them:

LIMITED STANDARD	SIZE	STANDARD
	X-Small	8415-753-6550
8415-261-6663	Small	8415-753-6551
8415-261-6662	Medium	8415-753-6552
8415-261-6661	Large	8415-753-6553
8415-262-5299	X-Large	8415-753-6554

TAKE COVER



When you go to load or operate an M4 irritant disperser you'd best be well covered.

Along with your fatigues (tightly collared and cuffed and the trouser legs tucked inside your boots) your toxicological agent rubber gloves, and your M9A1 field mask, you also need an M3 hood to shield any bare spots behind your face.

The gloves are QM items, and here are the FSN's for them:

LIMITED STANDARD	SIZE	STANDARD
	X-Small	8415-753-6550
8415-261-6663	Small	8415-753-6551
8415-261-6662	Medium	8415-753-6552
8415-261-6661	Large	8415-753-6553
8415-262-5299	X-Large	8415-753-6554

The new item for your wardrobe is called: Hood, gas mask, toxicological agents protective, M3. FSN 8415-261-6690 gets it from QM.

When you're tending the M4 irritant disperser it's also wise to have a spare set of fatigues real handy.

EASY DOES IT

Another way to protect yourself, when you're loading the M4, is to take it slow and easy, like this:

1. Open one bag of agent at a time.
2. Slit the bag clear across, and about five inches from the top.
3. Hold the slit shut and don't let go until you lower the bag well into the hopper.
4. Stretch yourself a good arm's length away, and about 45° upwind, from the hopper . . . then gently shake the bag empty.

CLEAN-UP

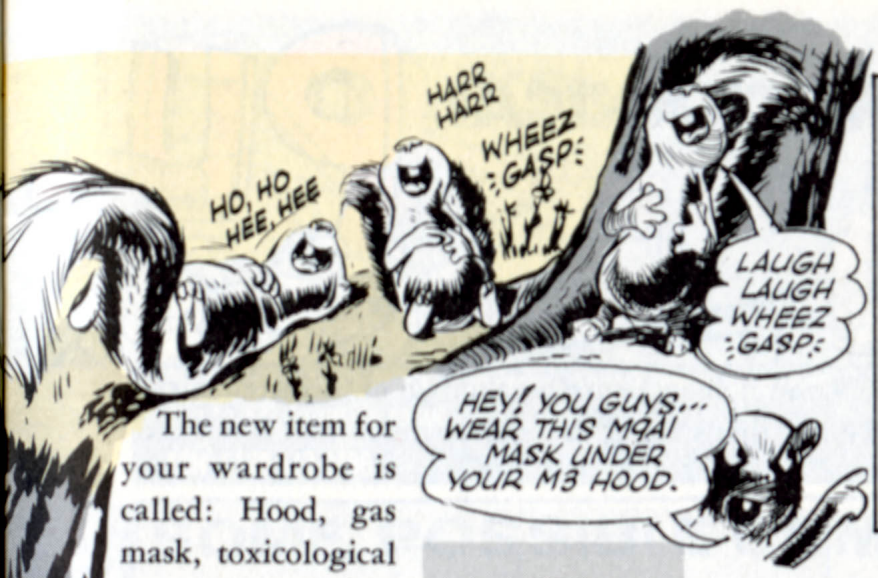
After loading or operating the M4 it's best to use water pressure to get the disperser decontaminated on the outside. You can use the water hose from a decon truck or any other high pressure hose, or you can just douse it with buckets of water, if you haven't got a hose handy. On some agent-covered areas, of course, you may have to use a scrub brush along with the water pressure.

Compressed air was OK'd for this chore at one time, but not any more . . . the air might float the spilled agent over to friendly things and innocent bystanders. So make a note of this somewhere handy so everyone concerned will know: Compressed air is **out** for decontaminating irritant dispersers.

To make sure you don't miss any of the after operation preventive maintenance services get hold of TM 3-1040-215-12 (Apr. 61).

HEAVE HARDER

When you toss an M15 WP hand grenade, make sure you really heave it. When it bursts, white phosphorous scatters over an area about 35 yards in radius. Change 3 to TM 3-300 says the fuze delay is 2.5-6 seconds (not 4-5), and the radius of burst is 35 yards (not 20).



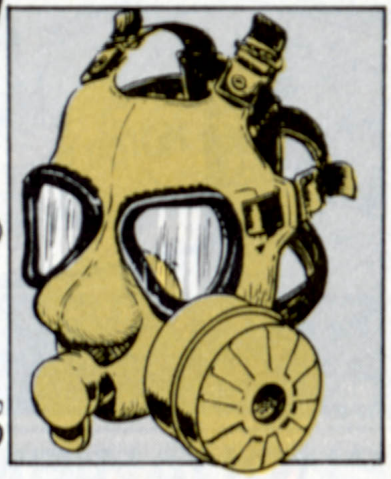
The new item for your wardrobe is called: Hood, gas mask, toxicological agents protective, M3. FSN 8415-261-6690 gets it from QM.

When you're tending the M4 irritant disperser it's also wise to have a spare set of fatigues real handy.

EASY DOES IT

Another way to protect yourself, when you're loading the M4, is to take it slow and easy, like this:

1. Open one bag of agent at a time.
2. Slit the bag clear across, and about five inches from the top.
3. Hold the slit shut and don't let go until you lower the bag well into the hopper.
4. Stretch yourself a good arm's length away, and about 45° upwind, from the hopper . . . then gently shake the bag empty.



CLEAN-UP

After loading or operating the M4 it's best to use water pressure to get the disperser decontaminated on the outside. You can use the water hose from a decon truck or any other high pressure hose, or you can just douse it with buckets of water, if you haven't got a hose handy. On some agent-covered areas, of course, you may have to use a scrub brush along with the water pressure.

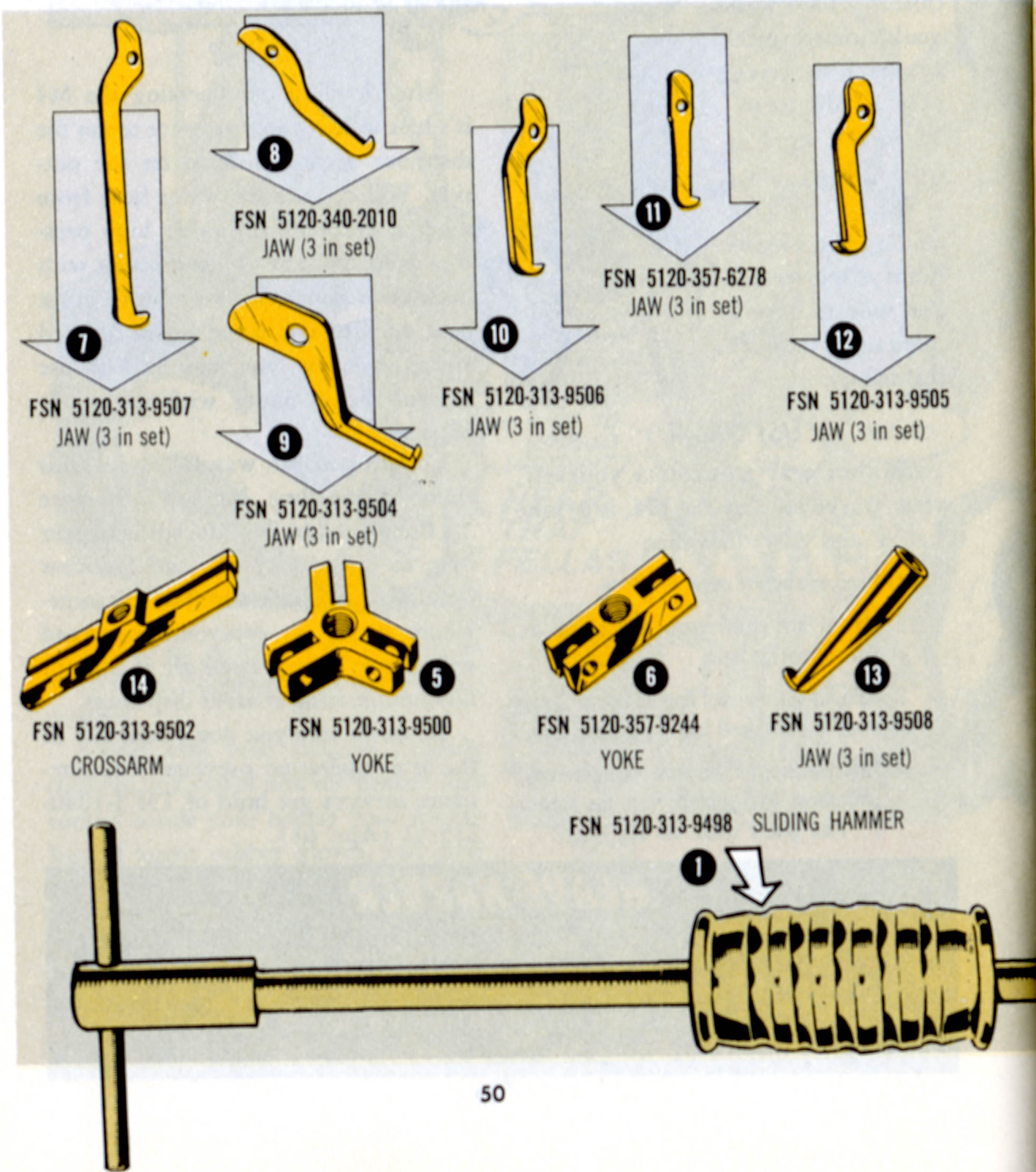
Compressed air was OK'd for this chore at one time, but not any more . . . the air might float the spilled agent over to friendly things and innocent bystanders. So make a note of this somewhere handy so everyone concerned will know: Compressed air is **out** for decontaminating irritant dispersers.

To make sure you don't miss any of the after operation preventive maintenance services get hold of TM 3-1040-215-12 (Apr. 61).

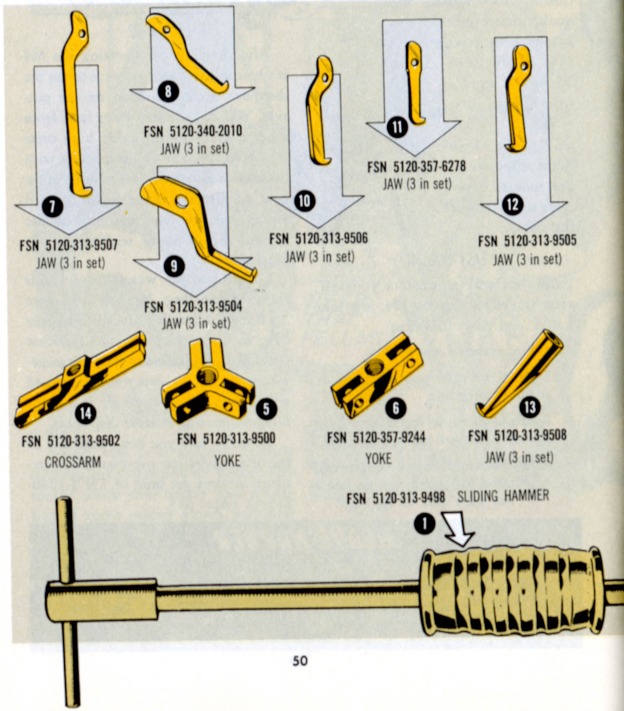
HEAVE HARDER

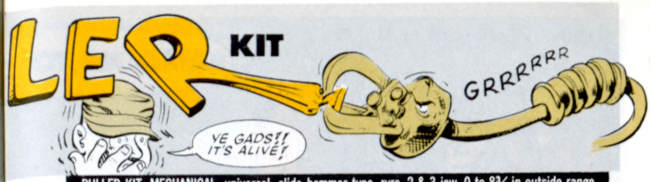
When you toss an M15 WP hand grenade, make sure you really heave it. When it bursts, white phosphorous scatters over an area about 35 yards in radius. Change 3 to TM 3-300 says the fuze delay is 2.5-6 seconds (not 4-5), and the radius of burst is 35 yards (not 20).

For those who want the FSN and nomenclature breakdown of the mechanical puller kit (FSN 5120-313-9496), that's found in your common tool kits, here you are:



For those who want the FSN and nomenclature breakdown of the mechanical puller kit (FSN 5120-313-9496), that's found in your common tool kits, here you are:

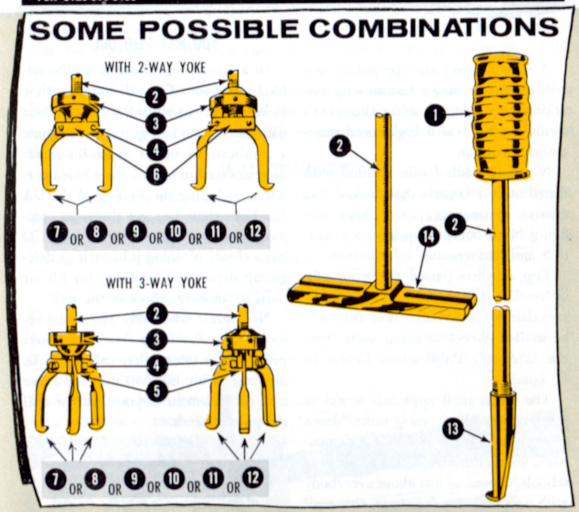


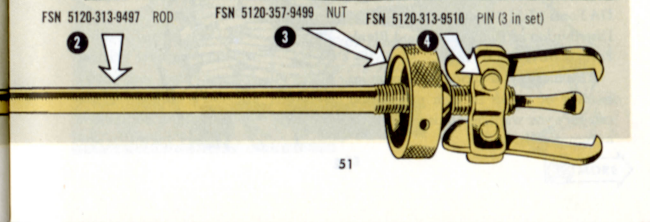


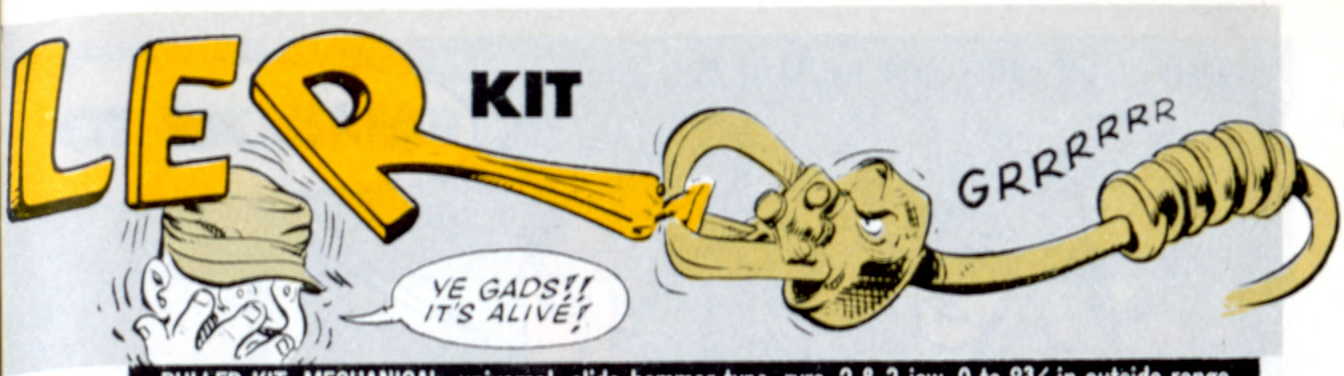
PULLER KIT, MECHANICAL: universal, slide hammer type, rvrs, 2 & 3 jaw, 0 to 8¾-in outside range, 1-in to 6¾-in inside range.

FSN 5120-313-9496 QM

SOME POSSIBLE COMBINATIONS





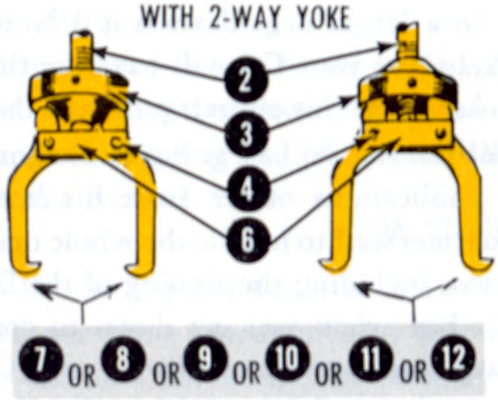


PULLER KIT, MECHANICAL: universal, slide hammer type, rvrs, 2 & 3 jaw, 0 to 8¾-in outside range, 1-in to 6¾-in inside range.

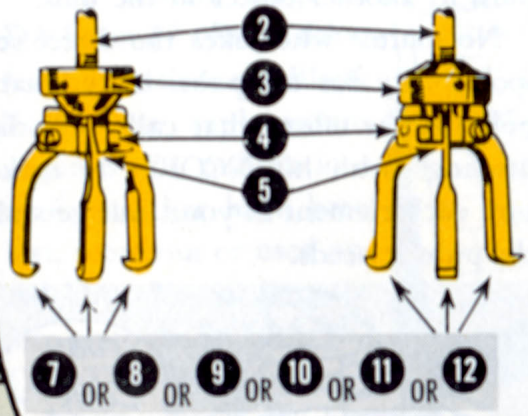
FSN 5120-313-9496 **QM**

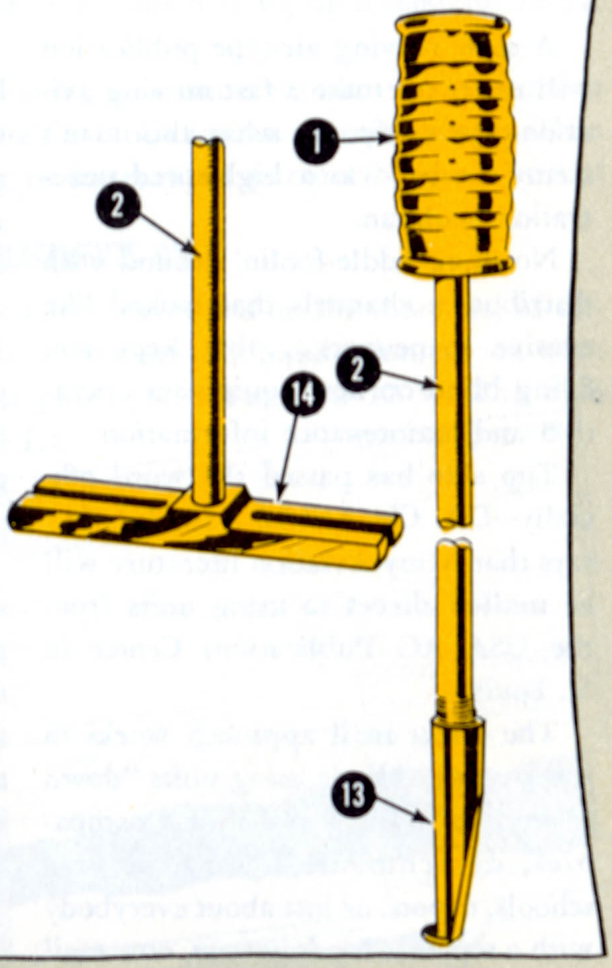
SOME POSSIBLE COMBINATIONS

WITH 2-WAY YOKE



WITH 3-WAY YOKE

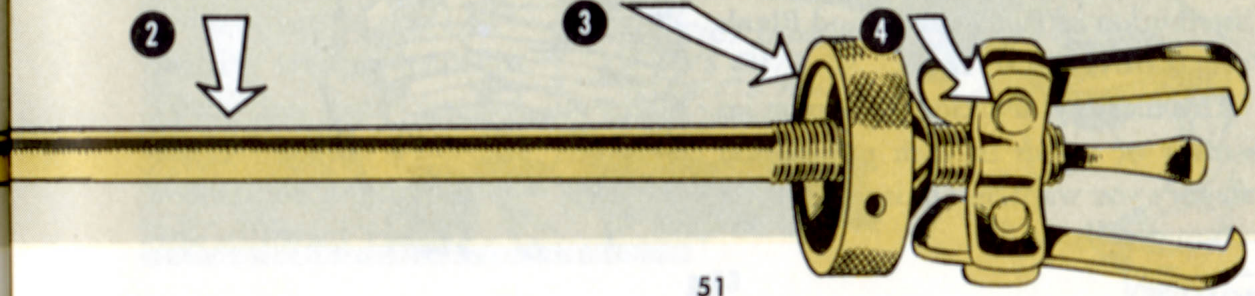




FSN 5120-313-9497 ROD

FSN 5120-357-9499 NUT

FSN 5120-313-9510 PIN (3 in set)



YOU MAY NEED ONE

A slow moving air-type publication will never overtake a fast moving aviation-type outfit. So what this man's Army needed was a high-speed penetration mailman.

No more fiddle-foolin' around with distribution channels that looked like evasive maneuvers . . . that kept you flying blind on new equipment operation and maintenance information.

Top side has passed the word officially—DA Cir 310-52 (12 Jul 61) says that Army Aviation literature will be **mailed direct** to using units from the USA AG Publications Center in St. Louis.

The direct mail approach works in reverse, too. **All** air using units "down to and including" battalions, companies, detachments, teams, service schools, depots, or just about everybody with a separate headquarters, now mail DA Form 12-31 (Requisition for Initial Distribution of Publications and Blank Forms) **direct** to St. Louis.

This means **you** decide the maximum number of copies in each publication category you want St. Louis to send you **automatically** on ID.

In a larger organization it'll be unlikely that your CO will have the time to keep after his aircraft pubs and their distribution. So he's going to designate a publications officer from his headquarters staff to handle the whole operation, including the signing of the DA 12. But when you get down to company and detachment level, your CO has a choice of doing it himself or delegating **direct** responsibility for his air pubs to another officer in the unit.

No matter who takes the direct responsibility for air pubs, it's a smart publications officer that calls periodic briefings with his NCOIC's to make sure each element in your unit gets all the pubs it needs.

OPERATION POST OFFICE WITH THE 12-31 OR...

YOU MAY NEED ONE

A slow moving air-type publication will never overtake a fast moving aviation-type outfit. So what this man's Army needed was a high-speed penetration mailman.

No more fiddle-foolin' around with distribution channels that looked like evasive maneuvers . . . that kept you flying blind on new equipment operation and maintenance information.

Top side has passed the word officially—DA Cir 310-52 (12 Jul 61) says that Army Aviation literature will be **mailed direct** to using units from the USA AG Publications Center in St. Louis.

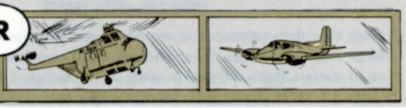
The direct mail approach works in reverse, too. **All** air using units "down to and including" battalions, companies, detachments, teams, service schools, depots, or just about everybody with a separate headquarters, now mail DA Form 12-31 (Requisition for Initial Distribution of Publications and Blank Forms) **direct** to St. Louis.

This means you decide the maximum number of copies in each publication category you want St. Louis to send you **automatically** on ID.

In a larger organization it'll be unlikely that your CO will have the time to keep after his aircraft pubs and their distribution. So he's going to designate a publications officer from his headquarters staff to handle the whole operation, including the signing of the DA 12. But when you get down to company and detachment level, your CO has a choice of doing it himself or delegating **direct** responsibility for his air pubs to another officer in the unit.

No matter who takes the direct responsibility for air pubs, it's a smart publications officer that calls periodic briefings with his NCOIC's to make sure each element in your unit gets all the pubs it needs.

ST. LOUIS, SIR



WHO DOES—WHO DOESN'T?

If you're not sure whether you rate your own 12-31, think of it this way. Do you **need** to make one out?

Specifically, any organization or activity that has its own headquarters **or** is operating completely independent of its parent outfit for long periods of time has special publication requirements of its own. Now a platoon, branch or section, for example, would look kind of ridiculous making up a separate 12-31, wouldn't it?

But if you're in a National Guard outfit, your state adjutant general makes out your 12-31 to cover the entire state's aviation literature requirements. Then he mails it off to St. Louis according to instructions put out by the National Guard Bureau.

DA 17—REPLACEMENTS ONLY

If your copy of 12-31 on file at St. Louis leaves you on the short end of certain pubs, it's your fault. Any time you want more of a publication, or you want to add on a new subject or category of pubs—you **change** the 12-31. This then becomes a **permanent** change in your ID.

You restrict usage of DA Form 17 (Requisition for Publications and Blank Forms) to **replacement** requests for publications or forms that have been lost, worn out or used up. All DA 17's on air pubs also go to the St. Louis AG Center by direct mail.

By the way, if you had any DA 17 due-outs at St. Louis before the new 12-31 mailing system went into effect, they were canceled on you. So you'll have to reorder on another 17 if you still want 'em.

MORE

ST. LOUIS, SIR

WHO DOES—WHO DOESN'T?

If you're not sure whether you rate your own 12-31, think of it this way. Do you **need** to make one out?

Specifically, any organization or activity that has its own headquarters **or** is operating completely independent of its parent outfit for long periods of time has special publication requirements of its own. Now a platoon, branch or section, for example, would look kind of ridiculous making up a separate 12-31, wouldn't it?

But if you're in a National Guard outfit, your state adjutant general makes out your 12-31 to cover the entire state's aviation literature requirements. Then he mails it off to St. Louis according to instructions put out by the National Guard Bureau.

DA 17—REPLACEMENTS ONLY

If your copy of 12-31 on file at St. Louis leaves you on the short end of certain pubs, it's your fault. Any time you want more of a publication, or you want to add on a new subject or category of pubs—you **change** the 12-31. This then becomes a **permanent** change in your ID.

You restrict usage of DA Form 17 (Requisition for Publications and Blank Forms) to **replacement** requests for publications or forms that have been lost, worn out or used up. All DA 17's on air pubs also go to the St. Louis AG Center by direct mail.

By the way, if you had any DA 17 due-outs at St. Louis before the new 12-31 mailing system went into effect, they were canceled on you. So you'll have to reorder on another 17 if you still want 'em.

PS MORE

WHEN YOU GOTTA CHANGE

Any time the equipment or organizational situation changes, it's time to change your 12-31, too. When the orders hit your hand changing your mission or station, that's the time to make an immediate (if not sooner) change to your 12-31. If you've gotta lot of changes to make, better mail in a complete revision.

DATES, TOO

Since orders changing your mission or duty station include an effective date, you've got to date your 12-31 change to coincide with the orders or it'll be a long haul bringing your publications up to date again.

Any outfit just picking up an aviation mission or starting off on a new one should include the date when they want their first distribution. But if you get extended TDY or PCS orders, show St. Louis two dates . . . the last day at the old station and the first day at the new station.

Since there's no place on either the 12-31 or the basic 12 for these dates, you'll have to tack on a separate letter with this info.

FROM: Commanding Officer

SUBJECT: We're Moving Out

TO: St. Louis

Dear St. Louis,

Just though you'd like to know we're leaving this cotton pickin' place for good around the beginning of July. So how about 8 days after that sending all those publications you have there to the next place we're going, which is

.01st TRANSPORTATION COMPANY
APO 392.98
SAN FRANCISCO, CALIFORNIA

SUBJECT: Permanent Change of Station

TO: Commanding Officer
USA AG Publication Center
1655 Woodson Road
St. Louis 14, Mo.

1. The .01st Transportation Company will depart Camp Clipped Wing 24 February 1962 on PCS to arrive at new duty station on or about 14 March 1962.

2. Mailing address of new duty station designated on revised DA Form 12-31, as inclosed.

FOR THE COMMANDER:

William L. Flopsdown
1/Lt. SIG.
Publication Officer

Incl:
as

THE CURRENT FORM

The 12-31, dated 1 Sep 61, is updated to cover the couple—three new aircraft either on final or just entering the pattern at Army Airfields these days. It also has some different wording on it. So let's do a quick pre-flight on her before she lifts off for St. Louis.

REQUISITION FOR INITIAL DISTRIBUTION OF PUBLICATIONS AND BLANK FORMS
(ARMY AVIATION LITERATURE)
FURNISHED IN QUANTITY DETERMINED BY USING ORGANIZATION (AR 310-1)

DATE: 1 Jan 62
ACCOUNT NUMBER: 2633
TYPE OF REQUISITION: ☒ INITIAL ☐ CHANGE ☐ REVISION

INSTRUCTIONS: THIS FORM WILL BE COMPLETED IN ACCORDANCE WITH INSTRUCTIONS ON REVERSE SIDE.

TO: Commanding Officer
USA AG Publications Center
1655 Woodson Road
St Louis 14, Missouri

FROM: 01st Transportation Company
APO 3.71
San Francisco, Calif.

SECTION I
OPERATIONAL AND MAINTENANCE LITERATURE APPLICABLE TO AIRCRAFT LISTED IN COLUMN A

TYPE OF AIRCRAFT	ECHELON OF MAINTENANCE TO WHICH LITERATURE IS APPLICABLE: FIRST OPERATOR AND CREW	SECOND ORGANIZATIONAL	THIRD AND FOURTH FIELD	FIFTH DEPOT
a	b	c	d	e
AC-1				
AO-1				
L-19	25	14		
L-20	5	2		
L-23	3	1		
U-1				
H-13	8	3		
H-19	2	1		
H-21				
H-23				
H-34				
H-37				
HC-1				
HU-1				
ALL FIXED WING	3	3		
ALL ROTOR WING	3	3		
ALL FIXED AND ROTOR WING	3	3		

TYPED NAME AND TITLE OF REQUISITIONER: G. O. Kickthetire, 1/Lt
Publications Officer

SIGNATURE OF REQUISITIONER: [signature]

REPLACES DA FORM 12-1, 1 FEB 61, WHICH IS OBSOLETE

DA FORM 12-31

In converting over, it's just a matter of repeating the same figures in the four quantity columns of Section 1. **But . . .** be sure to follow the instructions on the back of the new form. This means, for example, that most aviation organizations will just fill in Columns b and c.

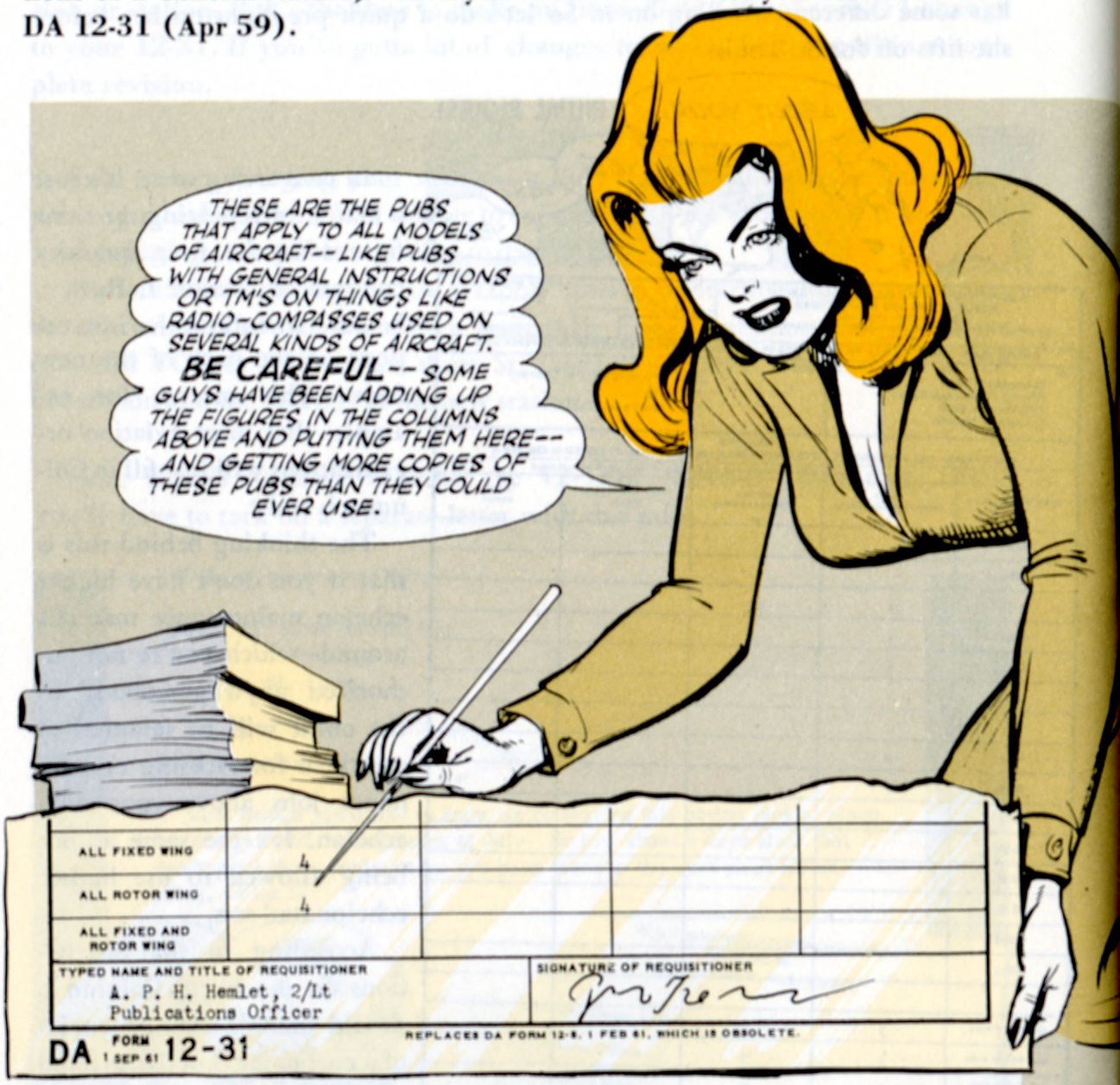
The thinking behind this is that if you don't have higher echelon maintenance manuals around—which you're not authorized anyway—nobody in the outfit will be tempted to use them for tackling maintenance jobs above your own echelon. It's the same as not being allowed to use higher echelon tool sets.

According to the instructions on the form, Column b should include enough copies of a particular -1 or -10 to hand out to every Army aviator who has been or is expected to be flying in a specific aircraft. Then add on as many extras as your CO thinks necessary for your authorized ground operating personnel and your unit reference library.

Column c should be based on unit maintenance experience. You want to ask for enough of each aircraft's maintenance handbooks, for your maintenance level (2nd echelon), so that nobody has to stand around with his finger in his mouth waiting his turn at a manual.

25 MORE

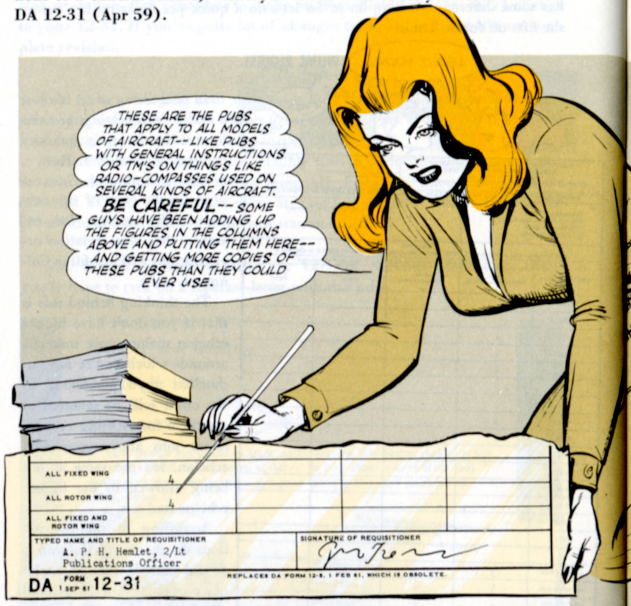
Column a portions of the form marked (1)—ALL FIXED WING (2)—ALL ROTOR WING (3)—ALL FIXED AND ROTOR WING are the same as the old abbreviation O/MI (Operational or Maintenance Instructions of a General Nature) which you had to write in for yourself on the old DA 12-31 (Apr 59).



Section II is a new one. As it says on the form, you use it for OTHER LITERATURE OF A GENERAL NATURE in the aeronautical field. A good f'rinstance is the UR Digest, which is the TB AVN 23-5-1 series.

In other words, just say how many copies you think you need on hand of any aviation publication you can't pinpoint by echelon of maintenance or model of air machine. Your TM 1-1-1A-8 on "Aircraft Structural Hardware" or TM 1-42A-1-1 on "Health Promotion of Personnel Engaged in Doping and Painting" are some more examples of general literature.

Column a portions of the form marked (1)—ALL FIXED WING (2)—ALL ROTOR WING (3)—ALL FIXED AND ROTOR WING are the same as the old abbreviation O/MI (Operational or Maintenance Instructions of a General Nature) which you had to write in for yourself on the old DA 12-31 (Apr 59).



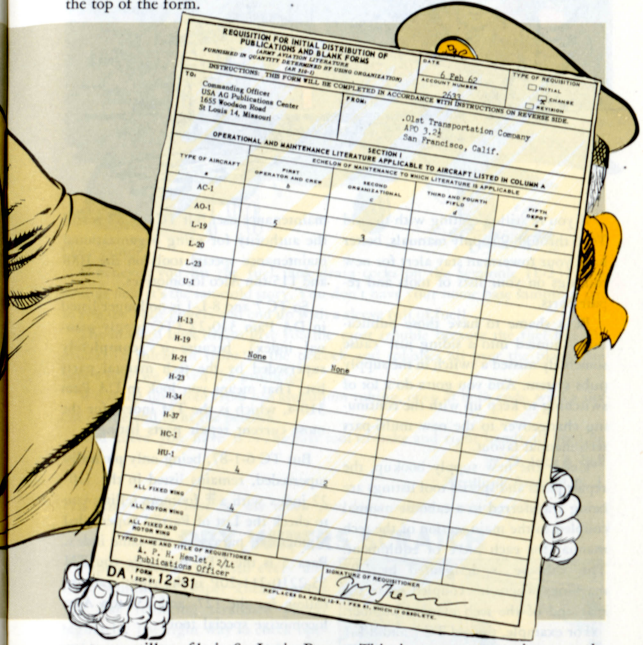
Section II is a new one. As it says on the form, you use it for OTHER LITERATURE OF A GENERAL NATURE in the aeronautical field. A good f'rinstance is the UR Digest, which is the TB AVN 23-5-1 series.

In other words, just say how many copies you think you need on hand of any aviation publication you can't pinpoint by echelon of maintenance or model of air machine. Your TM 1-1-1A-8 on "Aircraft Structural Hardware" or TM 1-42A-1-1 on "Health Promotion of Personnel Engaged in Doping and Painting" are some more examples of general literature.

CHANGES

When experience shows you need more or fewer pubs—or your equipment allowances change—just mail in another 12-31—marked as a change at the top of the form.

But instead of repeating everything, just fill in the space or spaces you're changing. No need to fill out the whole form again when your **initial** require-



ments are still on file in St. Louis. Besides, this makes it easier for the AG Center to spot the changes at a glance —and cuts down chances of missing items being changed.

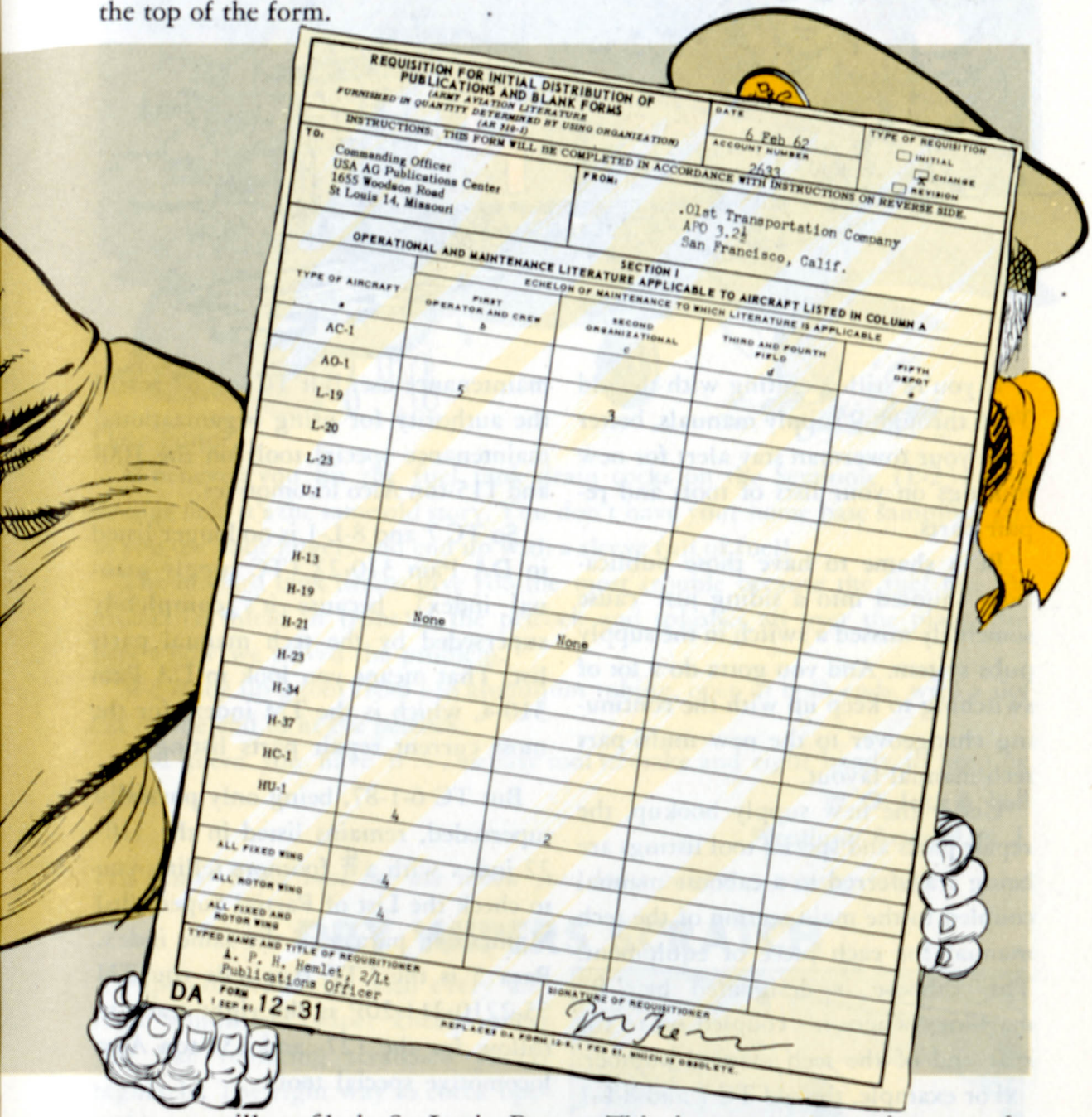
This is your opportunity to make sure you keep your ID (initial distribution) of new pubs at the level you actually need with an improved form and distribution system. Use it!

END

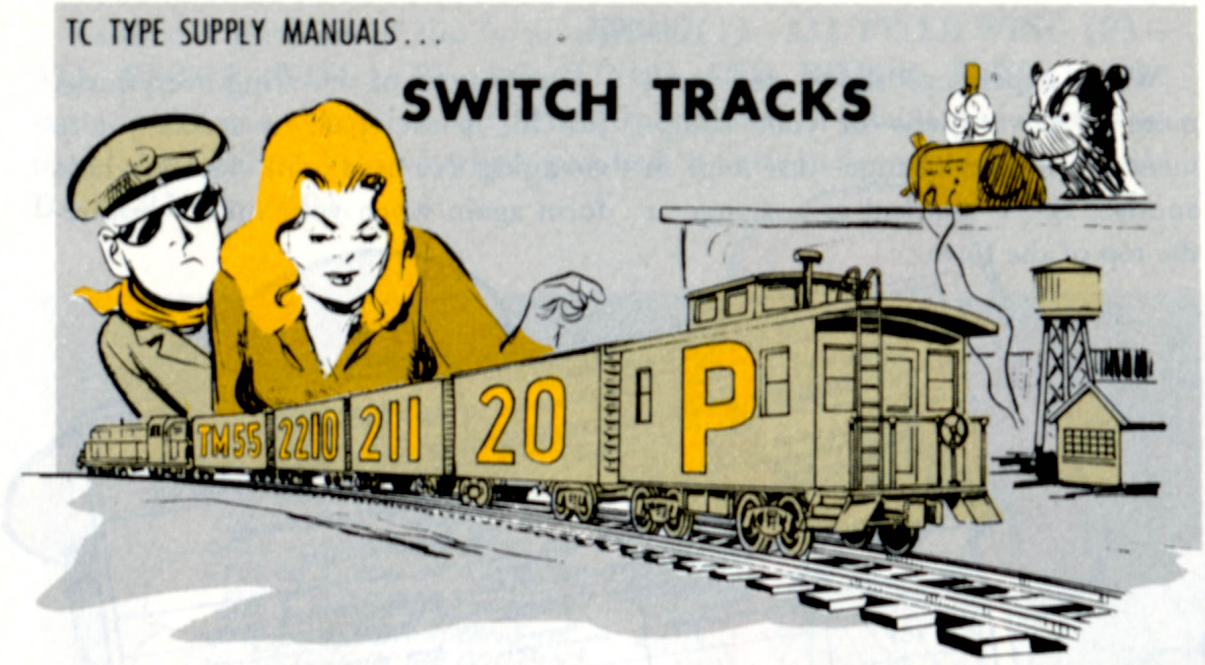
When experience shows you need more or fewer pubs—or your equipment allowances change—just mail in another 12-31—marked as a change at the top of the form.

But instead of repeating everything, just fill in the space or spaces you're changing. No need to fill out the whole form again when your **initial** requirements are still on file in St. Louis. Besides, this makes it easier for the AG Center to spot the changes at a glance—and cuts down chances of missing items being changed.

This is your opportunity to make sure you keep your ID (initial distribution) of new pubs at the level you actually need with an improved form and distribution system. Use it!



END



If you're still operating with the old TC 6 through 9 supply manuals, better have your towerman stay alert for new routings on your lists of tools and repair parts.

Be a shame to have those publications shunted into a siding just 'cause somebody missed a switch in the supply pubs system. And you gotta do a lot of switching to keep up with the continuing changeover to the new multi-part tech manual layout.

Under the new supply hookup, the repair parts and special tool listings are being transferred to a caboose manual coupled to the main section of the tech manual for each piece of equipment. This caboose is designated by "P" markings where it's coupled on to the rear end of the tech manual number.

For example, the old TC 7 and 8-L-1 supply manual is now superseded by TM 55-2210-211-20**P**, which also supersedes that part of TC 6-1-87 covering the 127- and 131-ton Alco locomotive's special tools for organizational maintenance use. But TC 6-1-87 is still the authority for using organizational maintenance special tools on the 100- and 115-ton Alco locomotives.

So TC 7 and 8-L-1 is no longer listed in DA Pam 310-22 (TC supply manual index), because it's **completely** superseded by the tech manual parts list. That means you look in DA Pam 310-4, which is the TM index, for the most current repair parts listing.

But TC 6-1-87, being only **partially** superseded, remains listed in the 310-22 index with a # footnote telling you to check the List of Partial Superseded Manuals in para 5 of the same index. Para 5 is the CTC that tells you TM 55-2210-211-20P is the right track to follow for the 127- and 131-ton Alco locomotive special tools.

Please don't get your foot caught in the crossover when your equipment's manuals change tracks. You might have to do some unauthorized humping to get caught up again.

NO SPLASH

Dear Editor,

Whenever you hit the fuel tank drain cocks on the Seminole (L-23) at a strange field it's the same old story. You don't have your home base sampling jar, so you use your fingers and end up with a sleeve full of fuel!

The inboard tank drains give you the most trouble because the fuel hits the protective shield in front of the petcock and splashes all over the place. But here's how we solved the problem.

We made up a tool from 1-in aluminum tubing, open at both ends, with a slot cut in one end to fit the petcock.

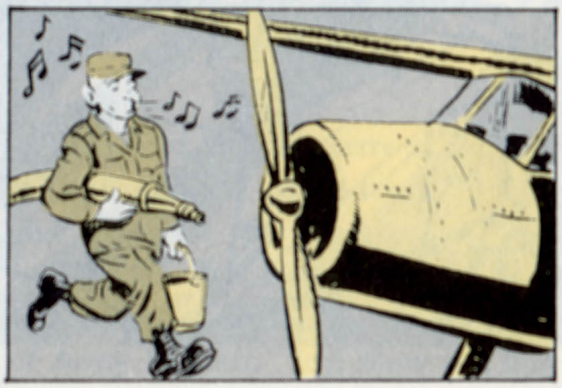
And there you have it . . . an easy tool to make and right handy to keep on board.

W. O. Jack A. Bell
Picatinny Arsenal, N. J.

(Ed Note—Good tool for use when you don't have a sampling jar.)

DRY WIPERS SCRATCH

Paper or water go with every aircraft windshield wiper check unless you like replacing scratched panels regularly. The right way to check operation on a dry run is to stick some smooth, tough wrapping paper under the blade. For a clean sweep check, though, keep the glass wet with plenty of water.



SHOT 'N THE EYEBALL

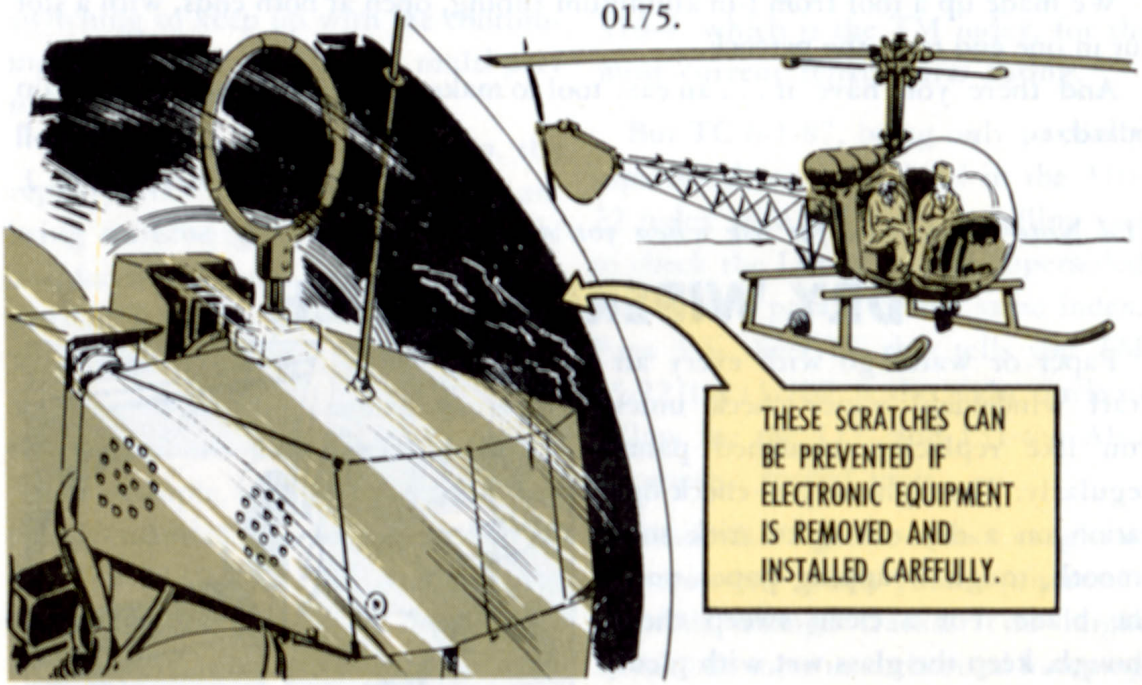
Ever crowd a grapefruit and get an irritatin' squirt in the eye for your trouble? It's mighty distracting!

And so are scratches and gouges in the plexiglass bubble of a chopper . . . sunlight can be reflected by them right smack dab in the pilot's eyes. In flight this distraction can be more than irritating. It can be downright dangerous.

One troublemaker is the cover of the electronic gear in the Sioux (H-13) cockpit. If communication maintenance men aren't real careful like when pulling the set or removing the cover, those sharp corners on the cover can make like chisels and dig right into the bubble.

If they cover that gear with cloth or padding of some sort, though, it'll prevent, or at least cut down, the possibility of scratching the bubble.

There's not much clearance between the set and the bubble . . . a reminder of this to your avionics friends can help prevent bubble scratches. If the bubble does get scratched, though, you can remove the scratches by using Plexiglass Polishing Kit, FSN 1560-624-0175.



SCRATCH ME!

You ever wind up with an irritating problem after adding oil to the tank of your Iroquois (HU-1A) gas turbine engine?

Spill some of that engine oil (Spec MIL-L-7808) on your skin and clothes and you'll probably end up with a good case of skin rash—if you don't get it off pronto!

You can remove spilled oil with a hand cleaner. If you don't have a cleaner on hand that'll do a good job, latch onto hand cleaner, FSN 8520-634-1596. You'll find it listed in SM 10-1-C6-19—SL (29 May 61). This cleaner will not only take off oil—but dirt, paint, tar and just about anything else in the bargain.

Of course if you spill some of the turbine engine oil on your clothes your best bet is to change right away so it won't soak through and cause a skin rash. You also want to wash oil-soaked clothes before they become stained. Fact is—that oil is powerful enough to soften paint. So you also want to clean up any spills on your chopper that may happen when you fill the oil tank.

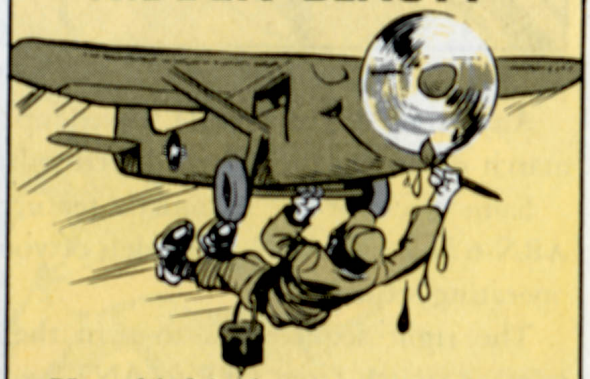
Before you add oil to your tank, be sure you check your supply to see if you have any oil packaged before 1 January 1958. If so, you have to filter it to guard against possible contamination. TB AVN 23–62 (5 Jul 61) "Uses and Grades of Aircraft Engine Lubricating Oils" will fill you in on the details.

But when you "fill 'er up" with oil, watch out for those spills . . . they can be mighty irritating—to you and your chopper's paint job.

TC WANTS 'EM BACK—FAST

Rapid service items deserve fast handling — going or coming — or they become critical items. So keep track of which TC items get this rush handling by checking the latest aviation, marine and rail item listings in SB 55-35 (11 Jul 61), "Return of Transportation Rapid Service Items."

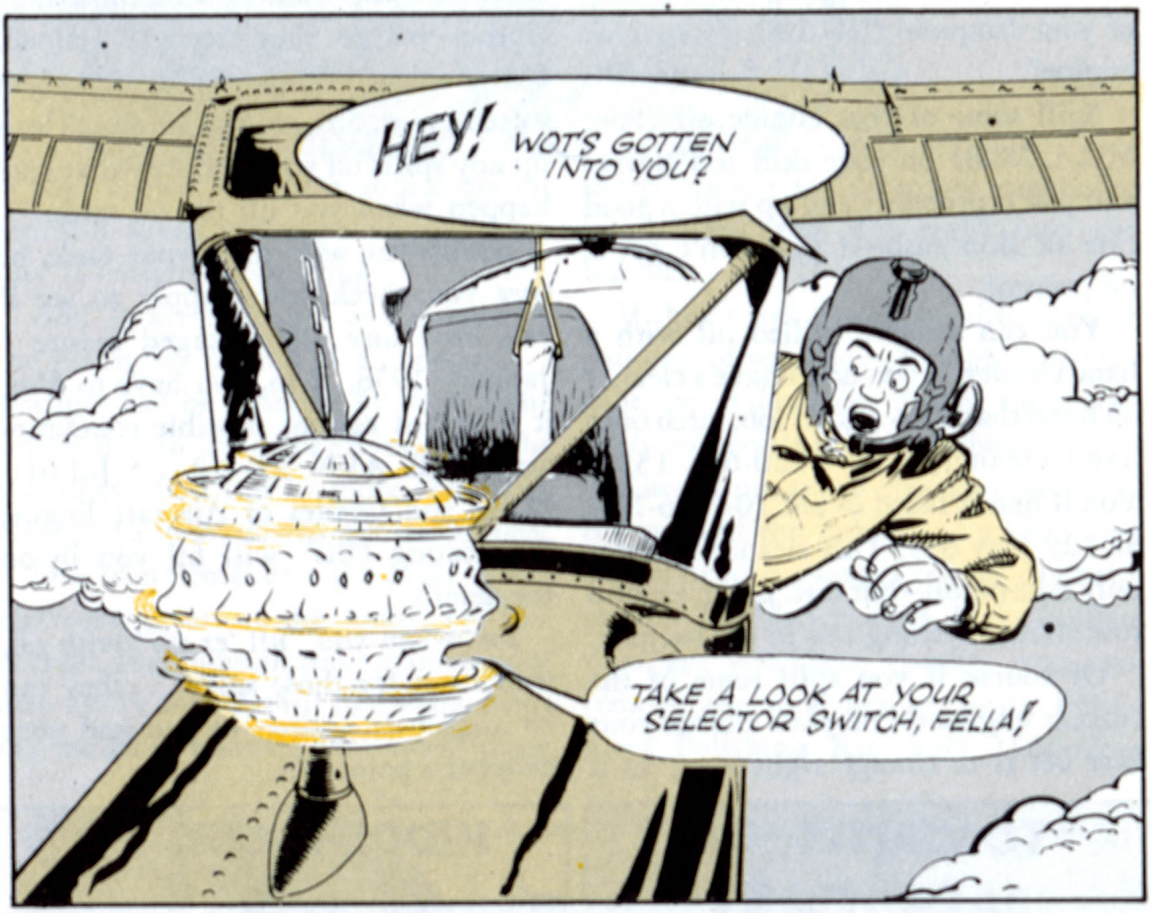
HIDDEN BEAUTY



Your bird look as pretty as she used to—or could she use a touch-up here and there? If she needs some brush work, latch on to a copy of TB AVN 7 (13 Jul 61), "Painting and Marking of Army Aircraft." It'll show you how to restore her hidden beauty.

WATCH THAT TUNING SEQUENCE OR . . .

DIG THAT CRAZY



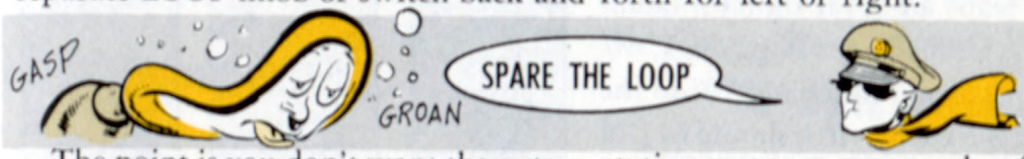
Any troop'd get a little mixed up by a commander who ordered him to march off in four different directions at once. Agreed?

Same goes for the automatic feature of the loop antenna on both the AN/ARN-6 and AN/ARN-59 models of your radio compass when you use the wrong operating sequence.

The right sequence is to turn the selector switch from OFF to ANT **before** you start to tune in any station. Going direct to ADF (ARN-6) or COMP (ARN-59) position, either by accident or intentionally, and then tuning, drives that poor automatic loop antenna mechanism nuts.

COMPASS

In the ADF position on the ARN-6 or the COMP position on the ARN-59, **both** the sensing and loop antennas are operating **automatically.** But the ANT position on either set limits the operation to the sensing antenna . . . while the LOOP position allows you to **manually** rotate the loop antenna by twisting the separate LOOP knob or switch back and forth for left or right.



The point is you don't want the automatic feature of the loop antenna operating during station tuning. The antenna mechanism can work itself to death automatically pointing to each station you tune past on that frequency band.

That drive mechanism is trying to stay with you by swinging the loop around to each station you tune across. It's like saying: North, then South . . . then East . . . back to North . . . now West . . . round and round we go!

IDENTIFY WITH ANT—ALWAYS

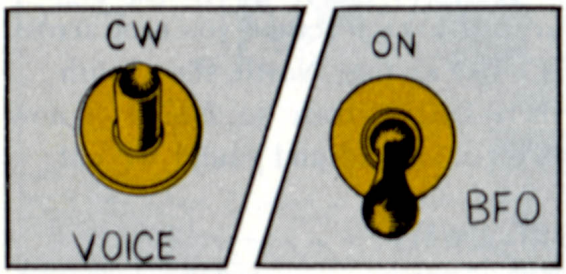
But not if you start out with the right procedure of leaving the selector switch in the ANT position until **after** you identify the station you want to work. **Then** snap the switch back to ADF (ARN-6) or COMP (ARN-59) position, so the loop antenna will come in automatically to seek the station you've decided to home on.

MORE

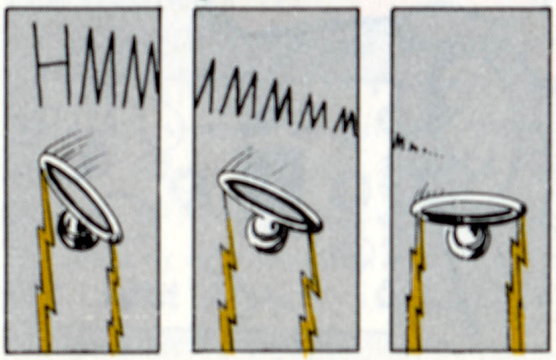
If you want an aural signal in addition to the compass reading, the CW/VOICE switch should be on CW in the ARN-6 or the BFO switch should be ON in ARN-59.

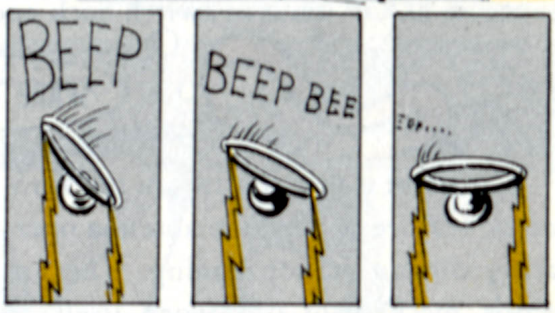
CW gives you a continuous tone: HMMMMMMMMMM
BFO gives you: BEEP-BEEP-BEEP-BEEP-BEEP

LOOP—HAND OPERATION



If you're going to work on a station using the LOOP position, then you'll definitely want either the CW/VOICE in CW or the BFO in the ON position. This will give you a steady, audible tone signal whenever the plane of the loop is not at an exact 90-degree angle from the station being worked. This helps you to make use of the NULL, providing you're using the right volume control procedures.





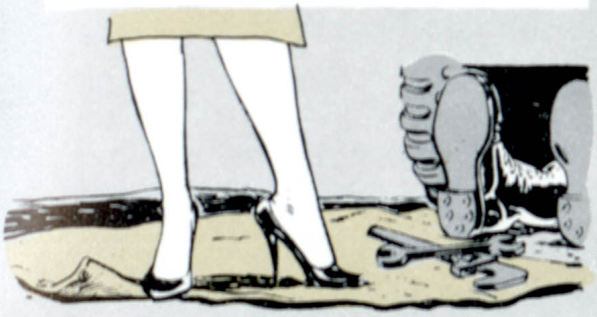
It so happens the manufacturer has tried to build in a little protection for the loop antenna gear mechanism on the ARN-59 by using a damping device. But it's still not a sure-fire guarantee and overworking the mechanism by mistakenly using COMP position during tuning can cause damage to the loop antenna gear train assembly on this ADF set, too.

IT'S 1st ECHELON PM

So following the right sequence in tuning is sort of like doing 1st echelon preventive maintenance, because it protects the equipment you're using from damage.

But just as important to you as a radio compass operator is the fact that you get better aural signal reception **without** the loop antenna during the tuning operation. The loop really won't help you in tuning until after you identify your station. So why add to your problems by complicating the operation?

Connie Rodd's BRIEFS



Too kind

You give carburetor fuel lines on any vehicle (land, sea, or air) extra care not to bang up the brass fittings. But don't carry this kindness bit too far when you disconnect and connect 'em. Some types have been putting sealer on those flared fittings—'taint necessary. Pity the mech who has to break a glued connection . . . that fitting'll get busted-up for sure!

Turn for the better

Have you figured out why you're busting the links for the sway braces on your Hawk launcher when you're in march order? Too much steering . . . that's the answer. All it takes is to jackknife or to make a turn of more'n 35 degrees and the rear bumper of your prime mover will clobber a link.

Not needed—period

Pass the word to your support unit. They're supposed to remove the warning instruction plate from **all** M19 cupolas on your M60 tanks—no matter what the serial number of the tanks might be. Sure . . . MWO 9-2350-215-20/6 says the plates get taken off cupolas on tanks serial numbered 191 through 500. But Ordnance now says they're not needed on any of the cupolas.

Take ten

Better check the pressure relief valve on your M13 breathing apparatus. If it doesn't have a guard over the relief valve button, then MWO 3-4240-233-25/1 (19 Sept 61) is the authority to get one. The guard will keep you from accidentally pushing the relief valve button and discharging the air within the closed air system. The MWO is an URGENT one but it only takes 10 minutes to apply.

Weight worries

When you're making up those weight classification sign kits called for in TB 9-263 (14 Apr 59), here's a tip on how to get the right bridge-class numbers for your vehicles. Check Appendix I to AR 746-2300-1 (11 Mar 60) and Appendix IX to FM 5- 36 (15 Aug 60). Where they differ, follow the pub with the later date—in this case—the FM.

A switch

It's been snowing UER's on the Ordnance people. And the storm center has been the Hawk modulator-oscillator. So Ordnance knows all about the trouble and is working on it. Now comes a request: Don't send in any more UER's on the modulator-oscillator unless you're having a problem with a magnetron with a serial number from 8624 and up. These maggies have been beefed up and shouldn't give you too much trouble. If they do, tho, get in a UER.

MEANWHILE . . . YOU CAN HELP

Give your maggies added life—no matter what their serial number—by doing a couple of simple things. Like f'rinstance . . . go along with the procedures set up in your TM's. Get so you can pick out the things that tell you that you're firing into the low modes. And keep those "on/offs" down as much as you can.

Would You Stake Your Life on the Condition of Your Equipment?

Issue 113
PS
1962 Series
THE PREVENTIVE MAINTENANCE MONTHLY
-20
"ALL READY FOR SUMMER, PRIVATE JONES...??"
WAR OFFICE
DEPARTMENTS OF THE ARMY AND THE AIR FORCE
OCTOBER 1-15"
DEPART
TEMBER 1-17!